
This is a reproduction of a library book that was digitized by Google as part of an ongoing effort to preserve the information in books and make it universally accessible.

GoogleTM books

<https://books.google.com>



UC-NRLF



B 3 017 950

ARMY
QUARTERLY

15

1921 28



THE ARMY QUARTERLY

With which is incorporated
The United Service Magazine

Edited by
Major-General G. P. DAWNAY
C.B., C.M.G., D.S.O., M.V.O.

and
Lieut.-Colonel T. A. HEADLAM
late East Yorkshire Regiment

VOLUME XV
(OCTOBER, 1927, and JANUARY, 1928)

London :
WILLIAM CLOWES & SONS, LTD.
94, Jermyn Street, St. James's, S.W.

761
A8
v.15

761
A8
v.15

**PRINTED IN GREAT BRITAIN
BY
WILLIAM CLOWES & SONS, LIMITED,
LONDON AND BECCLES.**

INDEX TO AUTHORS. VOL. XV.

AUTHOR.	SUBJECT.	PAGE
BECKETT, Capt. C. T., M.C., Royal Artillery.	Yeomanry Artillery	100
BIRD, Maj.-Gen. Sir W. D., K.B.E., C.B., C.M.G., D.S.O.	The Waterloo Campaign. Wellington's point of view (<i>with Maps</i>)	303
BROOKE, Lt.-Col. G. F., D.S.O., M.C., <i>p.s.c.</i>	"Aut Cursu, Aut Cominus Armis"	259
DALLAS, H. A.	Further Experiences of a Commissariat Officer with the British Army, 1814- 1815	78
DAVIES, Capt. C. Collin, Ph.D., Member of the Royal Asiatic Society.	An Imperial Problem: The North-West Frontier of India (<i>with Map</i>)	28
DENING, Major B. C., M.C., R.E., <i>p.s.c.</i>	Notes on Intelligence Training during Manœuvres	391
EDMONDS, Brig.-Gen. J. E., late R.E., and Capt. G. C. WYNNE, K.O.Y.L.I.	Military Operations: France and Belgium, 1915. (History of the Great War, based on official documents, by direction of the Historical Section, Committee of Imperial Defence)	134
EDMONDS, Brig.-Gen. J. E., C.B., C.M.G., R.E. (retired).	A Sliding Scale for Calculating March Starting Times	155
FORTESCUE, Sir John, K.C.V.O.	A Gallant Company. From "The Gallant Company"	315
"	A Penal Battalion. From "The Gallant Company"	126
FULLER, Col. J. F. C.	A Greater than Scipio Africanus?	333
HUDLESTON, F. J., C.B.E.	The Young Napoleon's Spy	350
MONTGOMERY - MASSING- BERD, Lt.-Gen. Sir A. A., K.C.B., K.C.M.G., <i>p.s.c.</i>	The Rôle of the Army in Imperial Defence	235
MUNN, Lt.-Gen. Sir George Mac, K.C.B., K.C.S.I., D.S.O.	The Recent Changes in the Adminis- trative Organization of the British Army	271
"	The Lines of Communication in Mesopo- tamia (<i>with Map</i>)	42

iii
(1862)

AUTHOR.	SUBJECT.	PAGE
ORR, Col. G. M., C.B.E., D.S.O., Indian Army (retired).	Indianization and the Indian Sandhurst Committee Report	68
PERCIVAL, Major A. E., D.S.O., O.B.E., M.C., The Cheshire Regi- ment.	The West African Frontier Force	91
PERCIVAL, Col. Sir Harold, K C.M.G., C.B.E., D.S.O.	Lost Armies	289
PIERS, Sir Charles, Bart.	A Veteran of the American Civil War (<i>with Map</i>).	144
RENNY, Col. L. F., C.M.G., D.S.O.	Coordination of the Artillery and Machine-Gun Fire Plan in the Attack .	372
SHEPPARD, Capt. E. W., O.B.E., M.C.	The First Duke of Wellington	358
STEWART, Major Oliver, M.C., A.F.C.	The Air Exercises	114
WILKINSON, Spenser, late Chichele Professor of Military History in the University of Oxford.	Killing no Murder: An Examination of Some New Theories of War	14
WYNNE, Capt. G. C., K.O.Y.L.I., and Brig- Gen. J. E. EDMONDS, late R.E.	Military Operations: France and Belgium, 1915. (History of the Great War, based on official documents, by direc- tion of the Historical Section, Com- mittee of Imperial Defence)	134

INDEX TO ARTICLES. VOL. XV.

	PAGE
Air Exercises, The. By Major OLIVER STEWART, M.C., A.F.C. .	114
Administrative Organization of the British Army, The Recent Changes in the. By Lieut.-General Sir George MACMUNN, K.C.B., K.C.S.I., D.S.O.	271
Abd-el-Krim, The Downfall of: Marshal Petain's Work in Morocco (<i>with Map</i>)	277
Artillery and Machine-Gun Fire Plan in the Attack, Coordination of the. By Colonel L. F. RENVY, C.M.G., D.S.O.	372
Appendix	191
Communications in Mesopotamia, The Lines of (<i>with Map</i>). By Lieut.-General Sir GEORGE MACMUNN, K.C.B., K.C.S.I., D.S.O.	42
Cursu, Aut Cominus Armis," "Aut. By Lieut.-Colonel G. F. BROOKE, D.S.O., M.C., <i>p.s.c.</i>	259
Editorial	1, 225
Engineer in the Army of To-day, The Function of the Military .	379
Experiences of a Commissariat Officer with the British Army, 1814- 1815, Further. By H. A. DALLAS	78
French Official Account, The. The Turn of the Tide in 1918 .	328
Foreign War Books, Notes on	158, 403
Gallant Company, A. From "The Gallant Company." By Sir JOHN FORTESCUE, K.C.V.O.	315
Imperial Problem, An. The North-West Frontier of India (<i>with Map</i>). By Captain C. COLLIN DAVIES, Ph.D., Member of the Royal Asiatic Society	28
Imperial Defence, The Rôle of the Army in. By Lieut.-General Sir A. A. MONTGOMERY-MASSINGBERD, K.C.B., K.C.M.G., <i>p.s.c.</i> .	235
Indianization and the Indian Sandhurst Committee Report. By Colonel G. M. ORR, C.B.E., D.S.O., Indian Army (retired) .	68
Intelligence Training during Manœuvres, Notes on. By Major B. C. DENING, M.C., R.E., <i>p.s.c.</i>	391
Killing No Murder: An Examination of Some New Theories of War. By SPENSER WILKINSON, late Chichele Professor of Military History in the University of Oxford	14

	PAGE
"Killing no Murder"	396
Lost Armies. By Colonel Sir HAROLD PERCIVAL, K.C.M.G., C.B.E., D.S.O.	289
Napoleon's Spy, The Young. By F. J. HUDLESTON, C.B.E.	350
Operations, Military: France and Belgium, 1915. (History of the Great War, based on official documents, by direction of the Historical Section, Committee of Imperial Defence.) By Brigadier-General J. E. EDMONDS, late R.E., and Captain G. C. WYNNE, K.O.Y.L.I.	134
Parliamentary Notes	189
Penal Battalion, A. From "The Gallant Company." By Sir JOHN FORTESCUE, K.C.V.O.	126
Preliminaries of the Marne, The. The French Official Account (<i>with Map</i>)	58
Reviews and Notices on Recent War Books and Articles on Military Subjects	180, 427
Scipio Africanus, A Greater than? By Colonel J. F. C. FULLER	333
Sliding Scale for Calculating March Starting Times, A. By Brigadier- General J. E. EDMONDS, C.B., C.M.G., R.E. (retired)	155
Veteran of the American Civil War, A (<i>with Map</i>). By Sir CHARLES PIERS, Bart.	144
Waterloo Campaign, The. Wellington's Point of View (<i>with Maps</i>). By Major-General Sir W. D. BIRD, K.B.E., C.B., C.M.G., D.S.O.	303
Wellington, The First Duke of. By Captain E. W. SHEPPARD, O.B.E., M.C.	358
West African Frontier Force, The. By Major A. E. PERCIVAL, D.S.O., O.B.E., M.C., The Cheshire Regiment	91
Yeomanry Artillery. By Captain C. T. BECKETT, M.C., Royal Artillery	100

Army Quarterly

CONTENTS

	PAGE
I. Editorial	1
II. Killing No Murder : An Examination of Some New Theories of War. By Spenser Wilkinson, late Chichele Professor of Military History in the University of Oxford	14
III. An Imperial Problem : The North-West Frontier of India. (With Map.) By Captain C. Collin Davies, Ph.D., Member of the Royal Asiatic Society	23
IV. The Lines of Communication in Mesopotamia. (With Map.) By Lieut.-General Sir George MacMunn, K.C.B., K.C.S.I., D.S.O.	42
V. The Preliminaries of the Marne. The French Official Account. (With Map.)	58
VI. Indianization and the Indian Sandhurst Committee Report. By Colonel G. M. Orr, C.B.E., D.S.O., Indian Army (retired)	68
VII. Further Experiences of a Commissariat Officer with the British Army, 1814-1815. By H. A. Dallas	78
VIII. The West African Frontier Force. By Major A. E. Percival, D.S.O., O.B.E., M.C., The Cheshire Regiment	91
IX. Yeomanry Artillery. By Captain C. T. Beckett, M.C., Royal Artillery	100
X. The Air Exercises. By Major Oliver Stewart, M.C., A.F.C.	114
XI. A Penal Battalion. From "The Gallant Company." By Sir John Fortescue, K.C.V.O.	126
XII. Military Operations : France and Belgium, 1915. (History of the Great War, based on official documents, by direction of the Historical Section, Committee of Imperial Defence.) By Brigadier-General J. E. Edmonds, late R.E., and Captain G. C. Wynne, K.O.Y.L.I.	134
XIII. A Veteran of the American Civil War. (With Map.) By Sir Charles Piers, Bart.	144
XIV. A Sliding Scale for Calculating March Starting Times. By Brigadier-General J. E. Edmonds, C.B., C.M.G., R.E. (retired)	155
XV. Notes on Foreign War Books	158
XVI. Reviews and Notices of Recent Books and Articles on Military Subjects	180
XVII. Parliamentary Notes	189
XVIII. Appendix	191

LONDON:

WILLIAM CLOWES & SONS, LTD.
94, Jermyn Street, St. James's, S.W.

Price Seven Shillings and Sixpence net.

P & O BRITISH INDIA

MEDITERRANEAN
EGYPT
INDIA
PERSIAN GULF
CEYLON
BURMA
SIAM
STRAITS



AUSTRALIA
NEW ZEALAND
E & S. AFRICA
CHINA
JAPAN
MANILA
MAURITIUS
Etc.

NEW ZEALAND & ASSOCIATED LINES MAIL, FREIGHT AND PASSENGER SERVICES.

*P. & O. and N.Z. Tickets interchangeable, also Tickets of P. & O.,
Orient and New Zealand Shipping and Union Companies.
All sailings subject to change, with or without notice.*

- 1.—London and Marseilles to Bombay, Karachi and Persian Gulf.
- 2.—London to Colombo, Madras and Calcutta.
- 3.—London and Marseilles to Ceylon, China, Japan and Australia.
- 4.—London and Marseilles to Port Sudan, East and South Africa.
- 5.—London to Queensland.
- 6.—London (cargo) and Southampton (passengers) to New Zealand and (by transhipment, passengers only) Australia via Panama Canal.
- 7.—United Kingdom (by any Atlantic line) via Vancouver or San Francisco to New Zealand, Australia, and the South Sea Islands.
- 8.—London (1 class only, 3rd class rates) to Australia via Cape of Good Hope.

ADDRESS:

- No. 1, 2, 3, 4 and 5.—For Passage, P. & O. House (Manager, F. H. Grosvenor), 14-16 Cockspur Street, S.W. 1; Freight or General Business, P. & O. & B.I. Offices, 122 Leadenhall Street, E.C. 3.
No. 6.—J. B. Westray & Co., Ltd., 138 Leadenhall Street, London, E.C. 3, or P. & O. House (first floor)—General Passenger Agent, W. L. James, 14 Cockspur Street, London, S.W. 1.
No. 7.—Union S.S. Co. of New Zealand, Ltd., P. & O. House (first floor)—General Passenger Agent, W. L. James, 14 Cockspur Street, London, S.W. 1, and, for Vancouver Service, any office of the Canadian Railways.
No. 8.—P. & O. Service, Australia via Cape, 31 Lime Street, E.C. 3, or P. & O. House, as above.
*B.I. Agents—Gray, Davies & Co., 122 Leadenhall Street, London, E.C. 3.
Paris (all routes)—Société Française P. & O., 41 Boulevard des Capucines.*

P. & O. ROUND TRIPS AND WORLD TOURS

Illustrated Handbook on application as below.

P. & O. BRITISH INDIA NEW ZEALAND & ASSOCIATED LINES
WEST END PASSENGER OFFICE
P. & O. HOUSE 14 COCKSPUR STREET LONDON S.W. 1

THE
ARMY QUARTERLY

Vol. XV. No. 1.

OCTOBER, 1927

EDITORIAL

ALL soldiers have been watching with interest the work of the Experimental Mechanized Force* during the last few weeks on Salisbury Plain. Until some official communication is issued with regard to the relative value of the various types of vehicle employed and to the conduct of the exercises, it is impossible to form any definite opinion as to the lessons which have been learnt. But it is clear from the reports which have appeared in the press that many interesting problems have come up for solution and that there are intricacies and difficulties in mechanical warfare which some of its more enthusiastic adherents have hitherto been rather inclined to under-estimate.

The purpose of the experiments on Salisbury Plain was to study : (i) the types of units which should constitute a mechanized force ; (ii) the specification of the vehicles required ; and (iii) the strategical and tactical uses of such a formation. It is obvious that it must take a considerable time for the General Staff to satisfy itself on matters such as these upon which depend the whole direction and conduct of mechanical warfare. It is probable that there will be more unanimity of opinion as regards the types of units required than as to the specification of the actual vehicles. It will, at any rate, take time to find a satisfactory compromise between speed and armour. The late Lord Fisher was of the opinion that " speed was armour," but the surface of the ground presents difficulties which do not exist on the sea, and many technical and other problems

* The Force consists of the following units : 5th Battalion, R.T.C. (48 light tanks) ; 3rd Battalion, R.T.C. (less 1 company) (1 company A.C.'s ; 1 company tankettes) ; 12th A.C. Company, R.T.C. ; 9th Field Bridgade, R.A. (all mechanized, 1 battery S.P. mountings) ; 9th Light Battery, R.A. ; 2nd Battalion Somerset Light Infantry (36 machine guns mechanized) ; 17th Field Company, R.E. (mechanized) ; Signal Unit (mechanized).

have to be solved before increased speed in a cross-country vehicle becomes merely a matter of increased horse-power. But the study of the strategic and tactical uses of a mechanized force need not await the achievement of mechanical perfection. Such a force combines armoured mobility with fire-power—a combination which has not existed since the general introduction of gunpowder—indeed, not since the days of the Parthians and the Mongols. It is clear, therefore, that the introduction of this new element must materially change the character of warfare. It will, we should imagine, make great demands on the art of generalship because in theatres of war suitable for the employment of mechanized forces armies are likely to be comparatively small. Flanks, bases, lines of communication will all be more accessible to a leader who has the art and craft of the great captains of the past.

* * * * *

The recent Air Manœuvres have aroused considerable attention, for, as Major Oliver Stewart points out in his article in this number of the *Army Quarterly*, the passage of time has dimmed in the public mind the memory of such unpleasant events as air attacks. It is just as well, therefore, that civilians should be made aware that there have been considerable developments in aerial warfare since 1918. The exercises, too, must have been useful to those who are responsible for our defensive organization, and one looks forward with interest to some official appreciation of the lessons which have been learnt. Major Stanley, whose views are of course his own and may not in any way be those of the Air Ministry, suggests that the two main things brought to light between the 25th and the 29th of July during the aerial attacks on London were first, the danger of neglecting our anti-aircraft defences—guns, search-lights and sound locators—and second, the necessity for improving the speed and climbing-power of R.A.F. fighting aircraft.

* * * * *

Without any public notification, so far as we have been able to discover, a far-reaching change appears to have been introduced into the conditions of entrance by competition to the Staff College. Hitherto the number of officers of the Royal Artillery and Royal Engineers admitted each year has been strictly limited to six or seven of the former and three or four of the latter. In the recently published list, containing the names of the usual number of successful candidates who will join the College next January, there appear the names of fourteen artillerymen and seven engineers, and it is understood that the vacancies were allotted in order of merit in the entrance

examination without regard to the arms of the Service. If it is the intention in future to select officers for training for the staff solely on their capacity to pass a competitive examination, it is not unreasonable to suppose that Camberley will gradually fill up with a large proportion of officers belonging to the scientific corps, the most important limiting factor to this being that officers of the Royal Engineers, and some officers of the Royal Artillery, lose certain special pay while they are students at the College.

Possibly, if the average age of the candidates were lower—but, as a matter of fact, the age limit has recently been raised to thirty-five—unrestricted competitive examination might be as good a way as any of selecting officers for staff training; but it is most unlikely, in spite of the fact that warfare is becoming more and more scientific, that we shall discover commanders by means of such a system. It must be remembered, however, that each year a certain number of officers who qualify in the entrance examination, but who are not high enough on the list to secure places by competition, are nominated for admission to the College, and it is possible, therefore, that the C.I.G.S. hopes to obtain his commanders from this category because, at the present time, it must be remembered that the majority of such officers belong to the infantry and have distinguished records in the war. The C.I.G.S. may have in his mind, too, a scheme for the attachment of officers of the Royal Artillery and of the Royal Engineers to infantry battalions for long periods, and he may be intending to tighten up the general, personal and professional qualifications required of candidates, and vouched for by the certificate of their commanders, before they are allowed to compete in the examination for the Staff College.

* * * * *

Although success in a competitive examination may be no real test of an officer's qualifications and general efficiency to be a commander, there is no doubt that nowadays it is of urgent importance that our future military leaders should be well-educated men in the usually accepted meaning of this term. They should possess, that is to say, in addition to a thorough knowledge of their professional duties, a store of general knowledge equivalent, at any rate, to that which is usually possessed by men who have entered for an Honours School at the Universities. In the late war, in which for the first time in history the whole resources of the nation had to be mobilized, our military leaders who were called upon to deal with the formation, the equipment, the organization, the training,

the administration, the leading of vast bodies of men, adapted themselves to their novel and stupendous task with a success that has been too little recognized by the majority of their fellow-countrymen. Nevertheless, the officers of the old Regular Army would be the first to admit that, had they been as well educated generally as they were professionally, they would have been much better equipped to deal with many of the complicated problems with which they found themselves confronted. Warfare in the future, as scientific methods of fighting are developed, is likely to become more difficult and more closely bound up with the life of the nation as a whole than it was between 1914 and 1918. It is essential, therefore, that the officers of our small Regular Army, upon whom may fall the task of training and leading the nation in arms, should be men of education capable of holding their own with the civilians with whom they will come in contact.

In this connection an article by Colonel Lucius Hudson Holt, of West Point, entitled "Brains of the Army," which appeared in the August number of the American Review, *The Forum*, is well worth reading. It shows that in the United States of America the military authorities fully appreciate the importance of a general education for officers to fit them for the exigencies of modern warfare. "Education," writes Colonel Holt, "has always been considered desirable in a commander, of course, but greater emphasis has been placed upon it in recent years than ever before in history. This emphasis has resulted from a clearer conception of the place and function of the professional soldier in our democratic country. . . . An important part of his present duty is to instruct in military matters the vast body of citizen soldiers who will form the bulk of our armed forces in future wars. To perform this duty successfully, he must have not only a thorough knowledge of his profession, but also a cultural equipment which will enable him to meet his civilian confrères on an equal footing." According to Colonel Holt, the American Army "from generals to second lieutenants" is going to school, and he states that the examinations "held annually to fill officers' vacancies in the Regular Army have gradually been broadened until now the successful competitor must display educational qualifications equal to those of a college graduate—indeed, many of those who take these examinations are college men." Colonel Holt, thus, seems to be convinced that the education supplied at the Service schools, and by means of post-graduate courses which are "spread out over a period of ten to twenty years" of an officer's commissioned service, is on as high

a level as the education to be obtained in the American universities and colleges. It may interest readers of the *Army Quarterly* to learn that an officer of the U.S.A. Army is not considered qualified educationally for duty as a General Staff officer until he has passed two post-graduate courses mainly designed to make him efficient in his own particular branch of the Service, has been through a special course of study to familiarize him with the work of the other arms in conjunction with his own, and has attended for a year's study at the General Service School at Fort Leavenworth. Even then he is not qualified to serve on the War Department General Staff until he has been for a year's course at the War College at Washington. "There"—and by this time he will be about forty years old—"he will struggle with the greatest problems of war, such as how to finance an army of four million men in a war that might last for four years, or how to mobilize any one of the country's important industries so as to make it contribute most effectively to the success of our arms in war. These studies carry an officer to the very heart of our commerce, industry, and the activities of our people. The solution of the problems involved requires a close study of the conditions that confront capital and labour."

Colonel Holt concludes his instructive article with the question, "What is the meaning of this great educational effort?" He answers it by explaining that the War Department in his country is engaged in the mass production of trained leaders and realizes that for this task the possession by them of purely professional knowledge will no longer suffice.

In this country the Army Council is faced with a similar problem.

● ● ● ● ●

The question thus naturally arises as to whether our existing system of military education supplies the best possible training for men who may be called upon to bear very heavy responsibilities should another great war arise. There is no reason to suggest that the education given at the Staff College is not all that it should be, for the course of study there is definitely designed to fit officers for specialized military work. But it is fair to ask whether the general standard of education at Woolwich and Sandhurst is high enough and whether it is conducted on the right lines. No education can serve its real purpose unless the student is made to think for himself. At our Universities the whole theory of education is based upon this principle. The student is guided, but not controlled. He is shown the lines on which he should conduct his reading, but he must work out his own salvation for himself. Might it not be

a wise policy to adopt more fully the methods of the Universities in the early training of our officers ?

* * * * *

Professor Spenser Wilkinson's article in this number of the *Army Quarterly* which deals with a chapter entitled "The Napoleonic Fallacy" in "The Remaking of Modern Armies"—a book recently published by Captain Liddell Hart—is a fair commentary on the art or science of war as expounded by certain modern writers. These students of things military would have us believe that the long duration of the World War, with its appalling roll of casualties, was largely due to a wholly wrong doctrine of warfare for which they hold Napoleon responsible. The fundamental error apparently of those who belong to what Captain Liddell Hart describes as the "orthodox schools" of military thought, is to be convinced that the surest road to victory is to destroy the enemy's armies in the field—or, to use that writer's own words, "that the national object in war can only be gained by decisive battle and by the destruction of the main mass of the enemy's armed forces." But with regard to the last war Professor Wilkinson suggests that the real causes which led to the excessive sacrifices of life "far from being due to the intention of defeating the Germans on the Western Front, must be attributed to the violation of elementary strategic principles." This is certainly no defence of the wisdom or ability of those who were responsible for the strategy and conduct of the campaign, but, at any rate, it is surely some exoneration of Napoleon. Indeed, the more one studies the military doctrines of the Emperor, the more one realizes their soundness and their applicability to the conduct of war for all time. The arms and appliances of warfare must inevitably change with the advance of scientific knowledge, and small highly-trained, quick-moving professional armies may, as von der Goltz suggested, replace the huge levies produced by compulsory service ; but the strategic object in war must always remain the same. It was, and is, and will be, to break down the enemy's will to resist.

When one nation goes to war with another nation, its only purpose is to compel its enemy to do what it wishes. Clausewitz, the "orthodox," and Captain Liddell Hart, the exponent of modern military thought, are in agreement on this point. The difference between them, therefore, appears to lie in the methods by which the defeat of the enemy is to be brought about. Professor Wilkinson in his article sets out the views on this subject held by these two eminent military writers, and fails to find any material

difference between them. He will probably not be alone in this quandary.

But presumably the new school of thought, as represented by the author of "The Remaking of Modern Armies," considers that in a future war between civilized nations an enemy's "will to resist" is to be shattered by aerial attacks on his civilian population, and by the employment of non-lethal gases "which may overcome the hostile resistance, and spread panic, for a period long enough to reap the fruits of victory, but without the last evils of killing or destruction of property." To those of us who are not sentimentalists, but who still regard the indiscriminate slaughter of civilians as outside the code of civilized warfare, it is somewhat disquieting to find that an English writer should countenance such a wholesale system of murder as would be inevitable if it were once recognized that the bombardment of unfortified towns from the air was permissible. It might be—although this is by no means certain and was not found to be the case in the last war—that the butchering of women and children and the destruction of property from the air would result in a speedy vanishing of the general will to resist, and that in this way victory might actually be secured by one of the belligerents at a less cost than if the war were fought out by more old-fashioned methods. But when picturing the frightfulness of air warfare, the new school of military thought is apt not to take into sufficient consideration the fact that anti-aircraft defence is only in its infancy. "During the late war," as Professor Wilkinson points out, "the anti-aircraft gun had not time to develop its powers . . . the artillery has not yet said its last word on the subject, nor have the defensive possibilities of chemistry and electricity been fully explained. The moment that anything approaching an effective defence against air raids has been devised the whole theory [advanced by the new school of thought] falls to the ground, for it depends entirely on the suddenness and swiftness of the destruction contemplated." There is much good sense in this view of the case. There is an antidote for every poison and it is usually found sooner or later; the contest for superiority between the projectile and armour still continues; but, whatever the weapons employed, whatever the methods of warfare may be, the object of war will still remain the same—the subduing of the enemy's will to resist with the least possible human and economic loss to the victor—and this can best be accomplished by the destruction, which does not necessarily mean the annihilation, of his armed forces.

* * * * *

Major A. E. Percival's interesting article on the West African Frontier Force, which appears in this number of the *Army Quarterly*, should encourage young officers who are keen to see the world and to gain practical experience of their profession to apply for a tour of service in this branch of His Majesty's forces. Major Percival warns his readers that West Africa, although the unhealthiness of its climate is often much exaggerated, is not a bed of roses and that there are hardships to be faced and discomforts to be endured. Nevertheless, he is undoubtedly right when he emphasizes the fact that "there is a man's job to be done there" and that the experience which it offers cannot fail to be of value to officers of the right type.

The West African Frontier Force, of which His Majesty has recently become Colonel-in-Chief, has a fine record of service. Its history can be traced back to the earliest days of British settlement on the West Coast of Africa, for it was as long ago as 1882, when the Crown took over control of the trading settlements on the Gold Coast, that the various armed forces were united into what has now developed into the West African Frontier Force. But, as Mr. Amery, Secretary of State for the Colonies, pointed out in his speech at the re-union dinner of the Force on the 6th of July this year, it is to the far-seeing policy of Mr. Joseph Chamberlain and Sir Frederick Lugard in 1897—the one as Secretary of State and the other as the creator of a frontier force in Nigeria—that the West African Frontier Force, as now constituted, owes its origin. It consists of the Nigeria Regiment, the Gold Coast Regiment, the Sierra Leone Battalion and the Gambia Company. The people of this country know but little of the arduous work which has been necessary to create the West African Colonies, but the success that has attended the efforts of successive administrators has been largely due to the courage and efficiency of the military force at their disposal. "No unit in the British Army," as Mr. Amery remarked in the speech to which allusion has already been made, "came into action in the Great War more successfully and quickly than the Gold Coast Regiment, which dashed into Togoland, captured that German colony and put an end to the important wireless station at Kamina." Then followed the strenuous campaign in the Cameroons in which every unit of the West Africa Force was engaged. It ended in the conquest of the country, despite a most stubborn and gallant resistance by the enemy. No sooner was this triumph accomplished than first the Gold Coast Regiment, then the Nigerian Brigade, was transferred to the other side of Africa where they played an important part in the campaign

against von Lettow. Throughout these campaigns the loyalty and devotion to duty of the native soldiers was beyond reproach.

* * * * *

There is sometimes a not unreasonable fear in the minds of officers who are anxious to make their way in their profession that by taking service with a colonial force they may not only lose touch with modern developments in the art of war, but also that they may get lost sight of in the keen competition for appointments and promotion. It is clear that the C.I.G.S. fully appreciates this point of view, because in his speech at the West African Frontier Force dinner he made it quite clear that distinguished service overseas in command of native troops, far from militating against an officer's chances, would count very much in his favour. He pointed out that a good many entries to the Staff College were by nomination, and he assured his hearers that the addition of the letters "W.A.F.F." after an officer's name would be to his advantage.

"There is a necessity," said Sir George Milne, "to induce the younger officer to go abroad. There are the great attractions of sport, inexpensive polo, good healthy existence, interesting travelling. It is rather lamentable that so few officers now volunteer to go abroad. It is necessary to have the best men of character to go out as young officers to such forces as the West African Frontier Force. The Force can rely on my support and the support of the Military Secretary to give it good young officers."

* * * * *

The Report of the Indian Sandhurst Committee is arousing some anxiety among those who are most familiar with India and our military problems in that country. The Committee's recommendations are far-reaching and it is not impossible that, as Colonel Orr suggests in his article in this number of the *Army Quarterly*, some of them go beyond its terms of reference. In any case it is quite clear, as Field-Marshal Sir William Birdwood pointed out in a recent speech in the Indian Legislative Assembly, that the Government in India cannot approve the Committee's proposals without long and earnest consideration. Nor can the Government of this country ask Parliament to sanction such important changes in the Indian military system until it has convinced itself of the effect of those changes on the efficiency of the defensive organization not only of India, but also of the Empire as a whole. Great Britain is ultimately responsible for the military defence of India, and no hasty step, therefore, must be taken by us which, by lowering the standard of efficiency of the Indian Army, might in any way

jeopardize the security and happiness of the teeming population of that great land. Colonel Orr is right to point out to English readers the many objections—ethnological, ethological, religious, physical, political—which there are to any scheme of making Indians largely responsible for the executive command of the Indian Army. He regrets that the policy of indianization was ever embarked upon, and there is no doubt that a great majority of those best acquainted with the conditions in India share his opinion. But, as this policy has been adopted, it is obvious that no British Government, whatever may be its own views, can go back upon it until it has been proved a failure after a fair trial. At the same time, it is equally clear that it would be folly, in order to placate political opinion in India or for any other reason, to press forward too hurriedly with so wide a scheme of indianization as that recommended by the Committee without the most earnest consideration of all that it implies.

* * * * *

The latest figures available indicate that the Territorial Army is 31,800 short of establishment. In Scotland, in the north of England and in Wales the units are much nearer up to strength than in the southern counties of England. This may be due, to a certain extent, to industrial conditions, but the figures, as *The Times* points out, are "a challenge to London and the South to show that the spirit that gave so many thousands of men to the defence of the country in war has not failed in peace."

The number of officers shows an improvement, but it is still 1,100 below establishment, and, if the Territorial Army is to become a really effective force for the purpose for which it is designed, it is clear that a vigorous effort must be made to provide it with its full complement of officers. It is said that a great deal of ignorance prevails as to the method of obtaining a Commission in the Territorial Army and that many people seem to imagine that when it has been obtained it is "an expensive luxury." If these are really the reasons why young men do not apply for Territorial Commissions, it should not be a matter of great difficulty for the War Office to make more public the method by which Commissions can be obtained and to give an approximate estimate of the expenditure involved.

The more probable reason, however, why the average young man does not join the Territorials is that given by Lieut.-Colonel H. D. P. Francis, Inns of Court Officers' Training Corps, in a recent letter to *The Times*. "In our experience," he writes, "one

of the chief difficulties which a young public school or University man has to face, when attempting any form of military service in the Territorial Army, is not so much that of cost, as of being able to devote the necessary time, particularly time to attend the annual training, which is generally fixed for August. There is . . . but little doubt that the social class from which the Territorial officer is drawn has nowadays to work much harder in his business or profession immediately on leaving school or University than was the case before the war, with the result that the potential subaltern does not feel himself able to take a Territorial Commission, because he cannot be sure that he can be spared from his office, particularly at a time when his seniors are accustomed to take their holiday, and in many cases he fears to jeopardize his position by requesting leave from business so as to attend camp."

There is no doubt much truth in this view of the case. Young business men who are given only two or three weeks' holiday in the year must be very keen soldiers or unusually patriotic to give up the greater part of this precious time to military duties. There may be some business firms whose directors and managers are ready and willing to give a few extra days' leave to those of their employees who are serving in the Territorial Army. But they are the exception, not the rule, and until the leaders of industry and commerce generally realize that there is an obligation upon them to assist in building up our second line of defence, it is unlikely in the extreme that the Territorials will ever be up to strength until another war is actually upon us.

Lieut.-Colonel Francis states that the experience in the Inns of Court O.T.C. is that a considerable proportion of non-commissioned officers and men after serving some years in the unit (which is recruited exclusively from members of the Bar and from public schools and Universities) do in fact take Commissions in the Territorial Army. If this is the experience of the Inns of Court O.T.C. in London, it might be well worth while for the military authorities to explore the possibility of forming similar extra divisional units of the Territorial Army in other great commercial centres.

* * * * *

General Leonard Wood, Governor-General of the Philippine Islands, a great colonial administrator and a soldier of high ability, died in August at the age of sixty-five. He entered the United States Army as a surgeon and served in this capacity until 1898, when, at the outset of the Spanish-American War, he assisted

Theodore Roosevelt to raise a regiment of volunteer cavalry. He took part in the campaign in Cuba as second-in-command of this regiment. After the restoration of peace Wood was appointed military Governor of Santiago City ; and he subsequently became Governor of Santiago Province and then Governor-General of Cuba. In these official posts he was extremely successful. He not only reorganized the public services but also inaugurated a campaign against yellow fever and the unsanitary conditions which prevailed in Cuba at that time. His administration led to a new era of health and prosperity in the old Spanish possessions. In 1905 Roosevelt, who then was President of the United States of America, sent Wood as Governor-General to the Philippines, a post he held for three years. He was then for a short time G.O.C. of the Department of the East with headquarters at New York, and in July, 1910, was appointed Chief of the General Staff—a post which he held until April, 1914. Throughout his tenure of office he endeavoured to arouse his countrymen to the dangers of unpreparedness for war and to the menace to the peace of the world of Germany's military preparations. He also took such steps as were possible within the limits of the appropriations at his disposal to be ready for war and for the introduction of general military training. When the Americans entered the Great War the Democrats were in power, and Wood as a prominent Republican had no chance of being given military employment. He was, however, allowed to go to France as a military observer in 1917, and shortly after his arrival in that country he was accidentally wounded. In October, 1921, the election of President Harding having ousted the Democrats from office, Wood was once more sent to the Philippines as Governor-General, and in the discharge of the difficult task of trying to educate the natives to take their share in the administration of the country he has laid down his life.

* * * * *

General Max Hoffmann, Ludendorff's successor as Chief of the General Staff on the German Eastern Front, died in July at the age of fifty-seven. A great soldier, staff officer and administrator, he had little of Prussian arrogance, and was opposed to Ludendorff's wild schemes for the wholesale annexation of conquered territory. Two of his books *Der Krieg der Versäumten Gelegenheiten* ("The War of Lost Opportunities") and *Tannenberg wie es Wirklich War* ("Tannenberg as it really was") have been reviewed in the *Army Quarterly* under "Notes on Foreign War Books." They reveal that Hoffmann was by no means a wholehearted admirer of the Great

General Staff System, and his work on Tannenberg shows that the First Quartermaster-General (Ludendorff) had little or no share in the conception and execution of that battle—that it was in fact won in spite of him. In his later days at least General Hoffmann was an advocate of an understanding with the British Empire.

* * * * *

Major-General Sir Harold Ruggles-Brise, K.C.M.G., C.B., died suddenly in July from pneumonia at the age of sixty-three in the midst of his activities as Secretary of the Officers' Association of the British Legion, in which he had done so much valuable service. Cambridge "cricket blue," Grenadier Guardsman, *p.s.c.*, Commandant of the School of Musketry, Hythe, Commander of the 20th Infantry Brigade, in leading which on the 31st of October, 1914, at the first battle of Ypres, he was badly wounded in the shoulder, and subsequently Military Secretary at G.H.Q., France, Ruggles-Brise had a career in the Army that may well be envied, and during which he made nothing but friends.

* * * * *

Brigadier-General R. E. H. Dyer, C.B., of the Indian Army, "Dyer of Amritsar" as he will go down to history, died in July after a long illness at the age of sixty-two. A fighting man in every sense of the word, little influenced by his two years at the Staff College, Camberley, when theory plainly failed to interest him, he appreciated the value of a hard decisive blow at the right moment. Born in India, and living most of his life there, few understood the native better. What might have happened had he not struck in no half-hearted manner at Amritsar no one ever can know. He acted as he did with a full knowledge of the case and of the possible consequences to himself, telling his wife, and at least one friend, that, if he did what he believed to be necessary, he would probably lose his Commission. Perhaps some day the public will be told all, and Dyer's correct appreciation of the crisis, and the stern measures which he took, may then seem to have been fully justified.

10th September, 1927.

KILLING NO MURDER: AN EXAMINATION OF SOME NEW THEORIES OF WAR

BY SPENSER WILKINSON, late Chichele Professor of Military History
in the University of Oxford

IN his latest work, "The Remaking of Modern Armies," Captain Liddell Hart takes up an idea which was thrown out many years ago by one of the most brilliant military writers of the last century, the late Baron von der Goltz. The author of "The Nation in Arms" suggested that perhaps one day the enormous armies produced by universal compulsory service would be replaced by small, highly-trained, quick-moving professional armies, and that at the head of such a force a new Alexander might emulate the exploits of his prototype. In Captain Liddell Hart's forecast the weapons of the army of the future are to be the bullet, the shell, and gas; the bullet to be fired by the machine gun or other automatic rifle, these arms and the gun to be wielded by men carried in tanks or analogous vehicles moving quickly and freely across the face of the country. Foot soldiers will be merely auxiliary to the tanks, and cavalry will be employed only for that close scouting which is beyond the power of the aeroplanes. These suggestions are attractively set forth and vigorously pressed. I have not the technical knowledge which would justify an independent opinion as to the mechanical details. They will certainly give the General Staff of the Army plenty to think about, for they cannot lightly be either accepted or rejected.

In his central chapter entitled "The Napoleonic Fallacy," the author propounds a new theory of war and denounces "the orthodox schools" of military thought. He sets out to show that the Napoleonic doctrine of warfare is wrong and that to its acceptance by the General Staffs of the Great Powers is due the deplorable condition to which Europe has been reduced as the outcome of the late war. I have read this chapter with some perplexity, because what has hitherto attracted me to Captain Liddell Hart's writings is his grasp of what Napoleon, borrowing an expression from eighteenth-century French writers, called "the sublime parts of the art of war"; and what modern writers call its psychological aspect. My notion

of orthodox doctrine is *quod semper, quod ubique, quod ab omnibus*. It is the view of war obtained by observing that which is common to the practice of all the great captains, from Alexander to the elder Moltke, and I imagine that that is the theory of which Captain Liddell Hart is an apostle. If he means by orthodox the theories which from time to time have had a passing vogue in the schools of the modern General Staffs, I should be untroubled. I have watched such doctrines come and go. There was the bubble of the *avant-garde générale*, blown large by General Bonnal and pricked by General Colin. There was the doctrine of the *offensive à outrance*, which possessed first the French and then the British General Staff on the eve of the war, with disastrous consequences. There was, as no one has better pointed out than Captain Liddell Hart, the reaction in France from the sound doctrines concerning dispersed order of the admirable French report on infantry tactics of 1875. This was an unhappy retransfer of faith from the bullet to the target. I should like to persuade Captain Liddell Hart that he is himself a disciple, in my sense, of the orthodox school, and that in this chapter he is propounding a paradox. It turns out that he is after that old will o' the wisp, victory without battles or bloodshed.

"When we take stock," he says, "of the appalling cost of the war in lives and money and our national exhaustion, we are surely justified in questioning whether the strategic aim and direction were sound." That is a proposition that no one will dispute.

Captain Liddell Hart describes as Napoleonic the belief "that the national object in war can only be gained by decisive battle and by the destruction of the main mass of the enemy's armed forces." He goes on: "the Great Powers have narrowed and distorted their whole conception of war; to this fundamental error is due the general state of financial, commercial, and moral decline and even bankruptcy to which the nations of Europe, in greater or lesser degree, are now reduced. . . . What was the object of our military strategy? The memoirs and despatches of the military leaders responsible for the formulation and execution of it reveal that it was the destruction of the enemy's armed forces in the main theatre of war. The attainment of this object took us over four years, cost this country nearly a million lives and an expenditure of roughly £5,000,000 a day."

On this I venture to point out that, although the most eminent soldiers thought the right plan would be to aim at the destruction of the enemy's armed forces in the main theatre of war, *i.e.* the German Armies on the Western Front, this plan was not consistently carried out. Instead, very large armies were sent to regions far away from

the Western Front and devoted to campaigns in subsidiary theatres of war, Gallipoli, Mesopotamia, Egypt, Palestine and Macedonia. Moreover, the object of the destruction of the enemy's forces in the main theatre of war was not attained. The German Armies on the Western Front were not "destroyed." They conducted their retreat without overwhelming disaster until the Armistice, which was due, in some measure at least, to the naval blockade of Germany.

The long duration of the war and its excessive losses, which Captain Liddell Hart attributes to the plan of concentration on the Western Front, might therefore with equal reason be set down to the non-execution of that plan and to the dispersion of the Allied forces over many theatres of war.

Neither of these sweeping statements is adequate. Success and failure in war arise from a multitude of conditions which cannot be reduced under a single head. Jomini, discussing in October, 1866, the defeat of Austria by Prussia, wrote, "these astonishing successes were brought about by a combination of those general causes which influence the fate of Empires, in the first rank among which we may in this case place the neglect on one side of the principles of strategy and on the other side their application." During the first year of the late war the principles of strategy were persistently neglected, as they usually are by the Governments of a Coalition.

"Nothing," said Napoleon, "is more important in war than unity of command." But in 1914 the enunciation of this principle struck on deaf ears.

The most ardent advocate of dispersion will probably agree that the German invasion of France in 1914 had to be met in the theatre of war where it took place. Its initial success was admittedly due to two mistakes made by the Allies. "The art of war," said Napoleon, "has invariable principles, of which the main purpose is to guarantee armies against the mistakes of their leaders concerning the enemy's strength." The first of these principles is always to act with the whole of your forces. The French made the mistake of supposing that the Germans would not put reserve divisions in the first line, they therefore kept back their own reserve divisions and so were greatly outnumbered. The British Government instead of sending to France as many troops as possible, and as fast as possible, sent in the first instance only four divisions and kept back the Territorials. Moreover, the French plan of campaign was foredoomed; it failed to reckon with the most effective stroke open to the Germans, the march through Belgium, and counted upon an invasion of Alsace and Lorraine, which, even if successful, would

not immediately threaten either the communications of the German Army or any vital point in Germany, and would still have to deal with the three great fortresses, Metz, Strassbourg and Mainz, while it was evident that a German victory on the Belgian frontier would directly threaten both Paris and the communications of the French Army in Alsace-Lorraine. It was in these first struggles, the battles along the frontier and the retreat, that the French suffered their heaviest losses.

The battle of the Marne, as has been shown by General Camon, was of the Napoleonic type. Napoleon's normal plan was first to engage the enemy along his whole front, then to attack one of his flanks by a detachment brought up by surprise. To meet this flank attack, the enemy must form a new front at a right angle to the end of his original front, thus withdrawing troops from some portion of his line between the attacked flank and the centre. Against the thus weakened point of the enemy's original front Napoleon then directed a decisive attack delivered by troops kept in reserve for the purpose. At the Marne the flank attack was delivered by Maunoury's Army. The gap produced was between the German First and Second Armies. At this gap the British Expeditionary Force was to strike. If a heavy enough blow had then been delivered, Camon thinks that the German Army would have been dislocated and would have had to retreat out of France. Perhaps the Expeditionary Force was not large enough to form the *masse de rupture* suggested by General Camon, but in any case the effect was not produced, as Sir John French had continued his retreat too far and started the advance from a line twelve to fifteen miles in rear of the position in which the French Commander-in-Chief expected it to be. A consequence of this delay was that the British troops reached the Aisne just an hour too late to be able to secure the position beyond the river before the German reinforcements came up. After that the fighting became stationary and many lives might have been spared if the Allies had made no serious attempt to break through the enemy's lines until they were in such strength as to ensure complete success.

The cardinal principle to be observed in the conduct of war is economy of force, which implies the concentration of effort at the decisive point, and, therefore, the reduction to a minimum of the forces to be used elsewhere. The British Government no sooner had its hands full of the war with Germany than it found itself, inevitably, at war with Turkey. At that time when Rumania, Bulgaria and Greece were neutral, Turkey could take no direct part

in the European conflict. The most crushing defeat of the Turks would have no effect whatever on the campaign in France, though it would make possible the supply of the Russian Army by way of the Dardanelles. The worst the Turks could do would be to invade Egypt and to take possession of the oilfields of Lower Mesopotamia. It was thought that any military success of the Turks would have a disturbing effect upon the large Mahommedan population of India. The plan of the General Staff was to land a small army in the Gulf of Alexandretta, where it would hold a position astride of or controlling the Baghdad railway, thus cutting the Turkish Empire in two and rendering impracticable the dispatch of any Turkish troops from Asia Minor either to Egypt or to Mesopotamia. The Turks would be obliged to attack it but could not invest it, as it would always be supplied by sea and could, if necessary, be reinforced. This sound plan was adopted and General Birdwood's Corps was assembled in Egypt and was ready before the middle of February to be moved to Alexandretta. But at the last moment the movement was countermanded, I believe at the request of the French Government, and the Cabinet decided upon a naval attack on the forts of the Dardanelles, "with Constantinople as its ultimate objective." The committee which made this decision was not informed that the plan of an attack on the Dardanelles had been carefully and repeatedly considered in the strategical departments both of the War Office and of the Admiralty, and had in each case been ruled out as impracticable. Moreover, long experience had shown that ships are at a disadvantage in attacking forts, and Admiral Duckworth's expedition in 1806 had shown that a fleet without an army cannot take Constantinople.

The War Council was persuaded to sanction this operation by a list of the advantages which its success would bring; it would cut the Turkish Army in two, it would give us control of Constantinople, it would bring Bulgaria to our side, it would open the way to Russia and to the Danube, and it would be equivalent to a successful campaign with the New Armies. In short, the War Council counted its chickens before they were hatched. The one pertinent question was whether the means available were suitable and adequate for the purpose. The War Cabinet reckoned without the Turkish Army.

Another strategical blunder, another case of the waste of forces, was Mesopotamia. Jomini, the first exponent of the Napoleonic theory, wrote, "There occur in almost all campaigns military enterprises undertaken to meet political views, often very important, but often by no means rational, which strategically speaking lead to serious mistakes rather than to useful operations . . . the political

objectives adopted in the course of a campaign ought to accord with the principles of strategy, and if not to be postponed until after the decisive victory." Baghdad, at the time when the Government ordered General Townsend to endeavour to take that place, was a political objective ; the Government thought that its capture would have a salutary influence on Indian feeling and that it was very desirable to have a victory somewhere. But General Townsend held that it could not be successfully carried out with the force at his disposal. There was therefore no probability of the victory which the Government desired, and the Government apparently neglected to consider the political effect of defeat. No doubt General Townsend's opinion was suppressed, so that the fault was not entirely the Government's, but the Government well understood that in any case large reinforcements would be necessary and must have been aware that those reinforcements could not be supplied in a reasonable time. Thus General Townsend's force and the forces employed in the vain attempts to relieve him were needlessly thrown away.

I have reviewed the events of the first year of the war in order to show that the excessive sacrifices of life, far from being due to the intention of defeating the Germans on the Western Front, must be attributed to the violation of elementary strategical principles. Has Captain Liddell Hart forgotten that of 750,000 British dead during the whole war no less than 235,000 (almost a third) fell in the four secondary theatres of war, the Dardanelles, Mesopotamia, Palestine and Salonika, and that the total number of troops employed in these theatres was no less than 1,628,000 combatants, or, if non-combatants be included, 2,118,000 ? He would probably admit that some part of Europe's post-war troubles are due as much to mistakes in the peace treaties as to errors in the conduct of the war.

The doctrine which Captain Liddell Hart denounces as erroneous and mischievous, and which he calls Napoleonic, is attributed by him not to Napoleon himself but to " his great German expositor, Carl von Clausewitz." The classical interpreter of Napoleon's methods was not Clausewitz, but one of Napoleon's generals, Jomini. Clausewitz is the representative of the ideas not of Napoleon, but of his chief German adversaries, Scharnhorst and Gneisenau. He explicitly disclaims the intention to formulate a system or to give rules or precepts for the guidance of generals ; what he tried to do was to think out the nature of war both in its general aspect and in its various phases.

He begins by asking what is war ? It is, he says, action by force

for the purpose of compelling the enemy to do our will. Force is the means ; to constrain the enemy's will is the object. To attain that object we must disarm the enemy ; this is the military aim. The enemy will meet force by force, so that if we are to overpower him we must grapple with his strength. This consists in his armed forces, his country with its population, and his allies. The natural order would be first to destroy his armed forces and then to conquer his country in which otherwise he might raise up fresh forces. But the war will not be ended until the enemy's will has been overcome, that is, until his Government and his allies have signed a treaty of peace or his people have made their submission. By the destruction of the enemy's armed forces is meant putting them into a condition in which they cannot continue to fight—the word “ destruction ” being understood not merely in a physical but rather in a moral sense.

This, says Clausewitz, is the theory of war in the abstract ; what it would be if all the world were always guided by pure logic ; it is war fought out to a finish—absolute war. The reality comes very far short of it. In practice the State which finds itself outmatched agrees to its adversary's terms long before its strength is exhausted. It is induced to do so by two considerations, either because it sees little or no prospect of turning the scales in its own favour, or that the price of success will be too great. To produce one or both of these frames of mind, the adversary need not make the extreme effort required for crushing blows. Once he has proved his superior strength he will have shown that the prospect of a change of luck is small, and he can raise for his opponent the price of success by wearing him out, by occupying parts of his territory, not with a view to annexation, but merely to injure the weaker side, or may use any other means of damaging him. All these are military aims, but in every case the military means is fighting—battle. From an enemy ready to fight nothing can be gained except by fighting. The paramount military aim, the destruction of the enemy's armed forces, has for its obvious counterpart the preservation of our own.

This being the theory of Clausewitz, what is according to Captain Liddell Hart the true doctrine to be contrasted with it ? I give it in his own words : “ The aim of a nation in war is to subdue the enemy's will to resist, with the least possible human and economic loss itself . . . our goal in war can only be attained by the subjugation of the opposing will . . . all such acts as defeat in the field, propaganda, blockade, diplomacy, or attack on the centres of government and population are seen to be but means to that end ;

we are free to weigh the respective merits of each, and to choose whichever is most suitable and most economic, *i.e.* that which will gain the goal with the minimum disruption of our national life during and *after* the war. . . . The destruction of the enemy's armed forces is but a means—and not necessarily an inevitable or infallible one—to the attainment of the real objective.”

With the best will in the world I fail to see that this is anything more than a repetition of Clausewitz.

It was the delusion of Clausewitz, says Captain Liddell Hart, that the armed forces themselves were the real objective. “From this false assumption it was the natural sequence that the combatant troops who composed the armies should be regarded as the objective to strike. Thus mechanical butchery became the essence of war, and to kill if possible more of the enemy troops than your own side loses was the sum total of this military creed.”

Nothing in the volumes of Clausewitz justifies this misinterpretation of his meaning, for he explains most carefully that the destruction of the enemy's armed forces neither means killing more of his men than are lost by the victor nor mechanical butchery. He means by it demoralizing his army, dislocating the military organism so that it cannot work. In short, he means what is ordinarily called a decisive victory. No army was ever more effectively destroyed in the military sense than that which surrendered to Napoleon at Ulm, or those that surrendered to the King of Prussia at Sedan or to Prince Frederic Charles at Metz. Yet in each of these Armies only a percentage had been killed or wounded when the mass of them became prisoners of war.

Clausewitz had seen in his own lifetime Napoleon handling ever-increasing forces with ruthless logic, and striking down with crushing blows one great State after another. He had also seen Napoleon wear out in Russia his largest Army, and had then watched the Allies turn to the attack and with overwhelming forces gradually destroy what was left of Napoleon's Army until he, too, was struck down and crushed. Here, thought Clausewitz, was some approach to the logical or absolute type of war. He did not know whether future wars would have the same intensity, the same tremendous development of force, but he thought that its peculiar character was due to its being a conflict of nations rather than merely of courts and cabinets, that any war of nations would probably also be of the same type and that in such a war the military aim of each side would probably be to strike down and to disarm the adversary. If that were the aim of one side, it would necessarily also be the aim of

the other. How, then, should such a war be conducted? What must be the plan of the commander whose aim should be to strike down the adversary and to dictate his terms? His answer was that if you are to overpower the enemy, you must concentrate your action as much as possible, and you must act as quickly as possible. This is in general terms an account of the method of the great invaders, not only of Napoleon, but also of Hannibal and of Alexander.

Captain Liddell Hart tells us that neither Napoleon nor Clausewitz understood the business, and he gives his view of the right method. A commander should be guided by the analogy of a boxing-match. "A boxer who uses his intelligence aims to strike a single decisive blow as early as possible against some vital point—the chin or solar plexus—which will instantaneously paralyse his opponent's resistance." This is no doubt neatly put, yet what else is it but Clausewitz—or Napoleon—in a nutshell? The doctrine which Captain Liddell Hart expounds as true is indistinguishable from that which he denounces.

It seems strange that after advocating what may be called the "knock-out blow" Captain Liddell Hart should object to battle as superfluous. He quotes the Marshal Saxe, "I am not in favour of giving battle . . . I am even convinced that a clever general can wage war his whole life without being compelled to do so." He contrasts this with Napoleon's letter to Soult (10th of October, 1806), in which he writes, "There is nothing I desire so much as a battle," and Captain Liddell Hart remarks, "the one wants to avoid battle his whole life and the other demands it at the first opportunity." Here he has been misled by his master, Clausewitz, who thought that the generals of the eighteenth century avoided battles for reasons of State, and sought, therefore, to gain their ends by other means. In this there is an element of truth, but it is not the real explanation of the apparent hesitations of eighteenth-century warfare. The modes of fighting are always conditioned by the weapons and by the structure of armies. From the earliest times until the end of the eighteenth century armies were solid masses covering only a tiny space in the vast theatre of war. An army took a long time to form in order of battle, so long that during the process an enemy who preferred not to fight could march away. Marlborough's correspondence is full of complaints of the difficulty of inducing the enemy to accept battle.

Marshal Saxe, who ranks as a great general because he won three famous battles beginning with Fontenoy, wrote in his

"Reveries" a chapter on the qualities that the commander of an army ought to have. Among them are: "The art of providing subsistence for his army and of sparing it; of so posting himself that he cannot be compelled to fight except when he wishes." He goes on to say: "I am not for battles, especially at the beginning of a war, and I am persuaded that a clever general might make war all his life without being compelled to fight one. Nothing reduces the enemy so much and advances matters more than this plan. You must constantly fight actions and wear down the enemy little by little . . . but for all that I do not pretend to say that when you find the chance of crushing the enemy you ought not to attack him nor to take advantage of any false moves he may make; what I mean is that you can make war without leaving anything to chance . . . when you do give battle you must know how to profit by your victory, and, above all, must not be satisfied with merely remaining master of the field."

Napoleon held precisely the same view. You ought not to give battle, he said, unless you can count on the odds being seven to three in your favour. Writing to Joubert (17th of February, 1797), he instructs him to retreat from position to position, and says, "to act otherwise would not be to make war, of which the art, when ones forces are inferior, consists in nothing but gaining time." The letter to Soult, quoted by Captain Liddell Hart, was written four days before the battle of Jena and a few days after Napoleon had explained to Soult that with 200,000 men in the shape of a battalion square there would be no risk in attacking in any direction an enemy whose force was half his own.

The adoption of the divisional system, by which an army was divided into a number of bodies, which could be spread out over the country for movement and drawn together for battle, made it possible to force a battle upon an unwilling enemy. This change had taken place between the time of Frederick and that of Napoleon.

Captain Liddell Hart continues his historical examples to show how mistaken are the writers of the Napoleonic school and how wrong is the orthodox doctrine. He approves of the generalship of Scipio Africanus. Hannibal defeated army after army in Italy, but could not take Rome, having neither sufficient numbers nor a siege train, and for years he was worn down by Fabius, who would not accept battle. Scipio, instead of attacking Hannibal in Italy, took his Army to Africa where it threatened Carthage. This brought about the recall of Hannibal with the remnant of his Army from Italy to protect the Carthaginian capital. Scipio had gained over

to the Roman side the master of the Numidian cavalry upon which Hannibal had previously relied, and Hannibal was outmatched in cavalry, in the then conditions the decisive arm. Accordingly, at Zama, Hannibal's Army was destroyed—in this case destroyed may be taken literally—and Scipio could then besiege Carthage without interference. Scipio was acting on the plan of Clausewitz, who pointed out that in a war in which the aim is the overthrow of the enemy the surest way to find his main force is to march on the enemy's capital.

Next we are told that in 1814 when the Allies at last marched upon Paris while Napoleon turned eastward to attack the communications of the German Armies, Paris was a "moral objective" while Napoleon was aiming at the destruction of the enemy's main armed forces! But Napoleon's Army was too weak to produce any effect.

Lastly: "In 1870 the German objective was Paris, and while in pursuit of it the French Army fell into their hands. In 1914 the German objective was the French Army, and in the pursuit of this object they missed both it and Paris." This is surely a misleading account. The German objective in 1870, as in 1914, was the French Army, with a view after its defeat to a march on Paris. The contrast, therefore, is not between the objectives, but between success and failure—the difference being due to the different qualities of Germany's adversaries in the two wars.

Finally, we come to the new theory which is to supersede those of Clausewitz and of Jomini and to improve on the practice of Napoleon. According to Captain Liddell Hart the possible means to be employed besides the destruction of the enemy's military power (which it seems that, after all his denunciation, Captain Liddell Hart does not abandon) are the control of communications and of the industrial resources, the occupation of the centre or centres of government and population (all these are included in Clausewitz's enumeration under the "country"), the capture and overthrow of individuals who are the mainspring of the opposing policy, and the intimidation of the people by methods of terrorism.

It is fairly obvious that, if an enemy with a very large army invades your country, you must either collect a very large army to meet him or must submit to his invasion. Captain Liddell Hart thinks he has found a way of escape from this dilemma; he will rely on tanks and aircraft. He tells us that in 1918 Colonel Fuller proposed "to launch a fleet of light fast tanks, under cover of a general offensive, which should pass through the German lines, and neglecting the fighting troops, aim straight for the command and

communication centres in rear of the Front. By the annihilation of these the disorganization and capitulation of the combatant units were visualized." This scheme was, however, not actually attempted. A plan of this kind might perhaps have been carried out in 1918 when the tanks were a novelty, but as, according to Captain Liddell Hart, tanks will be the principal arm of future armies this plan will hardly be practicable in the next war, because the fleet of light fast tanks will immediately be met by the enemy's tanks which they will not be able to neglect and pass by.

Then comes Captain Liddell Hart's great idea: "Aircraft enables us to jump over the army which shields the enemy's government, industry and people, and so strike direct at the seat of the opposing will and policy. . . . Imagine for a moment London, Manchester, Birmingham, and half a dozen other great centres simultaneously attacked. The business localities and Fleet Street wrecked, Whitehall a heap of ruins, the slum districts maddened into the impulse to break loose and maraud, the railways and factories destroyed. Would not the general will to resist vanish, and what use would be the still determined fractions of the nation, without organization and central direction? Victory in air-war will lie with whichever side first gains the moral objective. . . .

"Chemistry can now give us non-lethal gases which may overcome the hostile resistance, and spread panic, for a period long enough to reap the fruits of victory, but without the lasting evils of killing or destruction of property. . . .

"A swift and sudden blow of this nature inflicts a social injury far less than when spread over a number of years."

This, then, is the new method of warfare, in which instead of fighting the enemy's armed forces our own armed forces are to attack the enemy's whole population, assumed to be defenceless. The scheme rests entirely upon a number of assumptions which are very far from being proved. I venture to doubt whether it is practicable, whether it is economical, and whether it would produce the result aimed at, the immediate surrender of the enemy. The only experience we have to guide us is that of the late war. The Germans made altogether fifty-one airship and fifty-two aeroplane raids on this country. No munition factory of any importance, no government office, no vital centre of communication was destroyed. The total number of persons killed was 1,413. So far from frightening our people into submission, the air raids only increased their determination to fight the war to a finish. Would the result have been different if the destruction and loss of life had been ten times as

great? I venture to doubt it. Would it have been comparable to that which would have resulted from decisive victories at sea and on land? Supposing that at Jutland the Germans had crushed Jellicoe's Fleet as Nelson crushed that of Villeneuve at Trafalgar, and that Ludendorff had compelled Haig's Army to surrender as Moltke compelled MacMahon's Army to surrender at Sedan. What hope should we then have had of winning the war?

The next war, it is asserted, will begin by a race between the aerial fleets, each of which, evading the other, will try by bombardment to crush the spirit of the hostile nation. Success will come to the side which first strikes its blow. But this, for Great Britain, is a hopeless prospect, as it is quite certain that no British Government will take the initiative in making war.

Another fundamental assumption is that there is no means of defence against aerial attack. No doubt until quite recently the authorities of the Air Force have expressed the view that the aeroplane is an offensive and not a defensive weapon, that it is impossible to prevent hostile machines from crossing the line because the sky is too large to defend; and that there can never be in the air that sure line of defence for an island nation which a powerful fleet constitutes at sea. We do not yet know how far this opinion has been modified by the recent aerial manœuvres of which the object was to try the possibility of the defence of London against air raids. During the late war the anti-aircraft gun had not time to develop its powers, but I am sure that the artillery has not yet said its last word on the subject, nor have the defensive possibilities of chemistry and electricity been fully explored. The moment that anything approaching an effective defence against air raids has been devised the whole theory falls to the ground, for it depends entirely on the suddenness and the swiftness of the destruction contemplated.

Captain Liddell Hart admits that terrorism "even if temporarily successful, usually reacts amongst civilized nations to the detriment of the aggressor—by stimulating the will to resist, or by so outraging the ethical code of other nations as to cause their intervention."

Here Captain Liddell Hart is following Clausewitz, who pointed out that, if the wars of civilized nations are much less cruel and destructive than those of savages, the cause is to be found in the social condition of the States, both in themselves and in their relation to one another. This touches the root of the matter.

What is the most valuable element in our national life? What the best Englishmen most prize is their English character, a certain standard of conduct to which we try to conform. In accordance

with this standard we regulate the discipline of our Army and Navy in war. We forbid plunder, we forbid the murder of unarmed persons, we protect the women and children. Why? Because we feel that if we allowed these things we should degrade our own character. We think that to allow our soldiers and sailors to act like savages would be the moral suicide of our nation. That seems to me sufficient reason for doubting the wisdom of those who advocate projects involving the promiscuous slaughter of a population which they assume will be defenceless. I have yet to learn how such a method, even if it should prove practicable, can be reconciled either with the British character or the cause of civilization.

Clausewitz never asks the question why a State goes to war? He was a soldier, the servant of an absolute monarch. The cause of the quarrel was not his concern, though he very emphatically points out that the energy with which a Government can carry on a war depends on the degree to which the cause appeals to its people. The cause, therefore, far from being irrelevant, is vital. Captain Liddell Hart, following Sir Reginald Custance, writes: "If the citizens of a nation were asked what should be the general aim of the national policy, they would reply, in tenor if not in exact words, that it should be such as to guarantee them 'an honourable, prosperous and secure existence.'"

If Captain Liddell Hart had worked out the trains of thought of Clausewitz and of Sir Reginald Custance, he must have hit upon the true explanation of the terrible sacrifices of the late war. That the losses were much greater than was necessary has already been made sufficiently clear, but that they would in any case be very great was evident from the nature of the quarrel.

The German people were told, and believed, that their security was in danger, and that self-preservation required them to attack and to strike down France and Russia. They did not realize that by this action they threatened the security of most of their neighbours. Thus came about a war of which the object—security—appealed to the heart and soul of every nation concerned. No doubt the price was high, as it was bound to be, but the goods were delivered.

The history of wars has usually been written by soldiers interested mainly in the military operations and by historians seeking their political causes and consequences. Each modestly refrains from trespassing on the domain of the other. That is perhaps why the last word about war has seldom been uttered. It is that on the whole and in the long run the right prevails.

AN IMPERIAL PROBLEM : THE NORTH-WEST FRONTIER OF INDIA

(*With Map*)

BY CAPTAIN C. COLLIN DAVIES, Ph.D., Member of the Royal Asiatic Society

"Frontiers are indeed the razor's edge on which hang suspended the modern issues of war or peace, of life or death to nations."—LORD CURZON, "Romanes Lecture," 1907.

THE importance of a frontier lies in the pressure behind it, the more populated a district the greater the pressure. So finely adjusted are European frontiers that no Power can annex a town or even the smallest village without disturbing the balance elsewhere. In South America, where boundaries are still very imperfect, there is no excitement about them normally; and, because the various districts are not over-populated, there is not the same intensity of atmosphere. Midway between these two extremes is the position occupied by the North-West Frontier of India lying between the Russians in Central Asia and the British in India. The advance of either Power has not been fatal in the European sense; there is really no balance of power here, only the struggle between these two great Powers. But it can be stated without any fear of contradiction that the most prolific cause of strife between nations has been the vexed question of frontiers.

All nations and great empires have continually striven to strengthen their boundaries, and to make their frontiers as strategically perfect as possible. In Asia, throughout the past century, two great Powers, separated by the mountains of Afghanistan and the deserts of Persia, were continually drawing closer and closer together, until, at one time, it seemed as if the whole of the debatable area which separated them would, sooner or later, be annexed by the stronger or be divided by agreement. At the root of our wars with Afghanistan, in 1839 and in 1878, was this desire to strengthen the existing bulwarks on India's only vulnerable frontier. Both in 1878 and in 1884, England and Russia were on the verge of war, owing to

the former's dread of Russia's aggressive policy in Central Asia. That this fear of Russia was the real cause of the Second Afghan War (1878-1880) is now generally recognized. The Penjdeh incident is too well known to need any description here.

Any great Power that fails adequately to protect its frontiers ceases to be great ; any Empire that neglects this important duty of self-preservation is eventually overthrown. India, unguarded, with the mountain passes of the north-west unsecured, became the prey of Asiatic freebooters ; Rome fell because her dykes were not strong enough to hold back the flood of barbarian inroads ; and, in the eighteenth century, Poland, with no natural frontiers, had to submit to being partitioned.

From the earliest days of the British connection with India there have been two opposing forces at work, a forward tendency, and a policy which sought to prevent, or to restrict, expansion. Contrary to the wishes of the Directors of the East India Company and of fox-hunting politicians at home, British rule was extended in India, until the mountains of the north-west were reached. Viceroy and officials, pledged to a policy of non-annexation, were sent out from England, but, in the majority of cases, they found themselves irresistibly forced by "imperious necessity" to move forward and to acquire fresh territories. The Act of 1784 declared all schemes of conquest and extensions of dominion repugnant to the wish, honour and policy of the nation. This was followed, however, by the conquests of Wellesley, which can be compared only with the annexations of Dalhousie. At first our conquests were forced upon us by French intrigues within Hindustan, and by a desire to blot out the Mahratta pest. It was an external menace from the direction of Central Asia that forced us to hold the gates of the north-west.

From the conquest of the Punjab, in 1849, frontier policy was in the hands of administrators and politicians of the Lawrence, or non-intervention school, but the arrival of Lord Lytton, in 1876, marked the end of "masterly inactivity." It was the Second Afghan War, 1878-1880, and the consequent occupation of Afghan territory, that impressed upon statesmen the necessity for a scientific frontier. Military strategists became divided into two opposing camps, the Forward and the Stationary. Both these terms are unfortunate in that they can both be subdivided into the extremists and moderates. The extreme section of the Forward School did not know where their advances would stop ; the moderates desired the best possible strategical frontier with the least possible advance. On the other hand, the extreme advocates of non-intervention would have held

the Indus line ; the moderates were inclined to an advance, if it could have been proved to them that Russia constituted any real menace.

What, then, is the true frontier of India on her north-western borders, and what is our best line of defence ? There are really four possible lines of resistance ; the Indus, the old Sikh line, the Durand boundary, and the so-called scientific frontier.

The Duke of Wellington may be cited as an example of a famous general who advocated meeting an enemy on the banks of the Indus, but, it must be remembered, that this was only proposed as a temporary expedient in 1808 ; no permanent occupation of this line was advocated. He qualified his views in the following words :—

“ The art of crossing rivers is now so well understood, and has been so frequently practised, and so invariably, I believe, with success, in the late wars in Europe, that we cannot hope to defend the Indus, as a barrier. . . . I have no great reliance upon that river as the barrier to India.” *

All previous writers have gone astray in supposing that the Indus was once the north-west frontier of India. This is the origin of the “ Back to the Indus ” cry, which fortunately is seldom heard nowadays. One thing is certain : the Indus has never been the boundary ; the Indus frontier, in the literal sense of the term, never existed. We inherited our frontier from the Sikhs, who never held the river line but the foothills towards the independent Pathan country.

The greatest exponent of the Indus boundary was Lord Lawrence, who was strongly opposed to any forward move beyond the trans-Indus foothills. He advocated meeting any invader in the valley of the Indus ; that it would be an act of folly and weakness to give battle at any great distance from our base ; and, that the longer distance an invading army had to march through Afghanistan and the tribal country, the more harassed it would be. He was of opinion that our true policy lay in attacking the enemy as he debouched from the mountain passes. Consequently, he objected to any extension of roads and railways towards Afghanistan, which country should be left undeveloped, so as to render the passage of an army as difficult as possible. During the anxious period of the Mutiny, Lawrence proposed that Peshawar should be evacuated and the left bank of the Indus held in its stead. Fortunately the wiser counsels of Edwardes, James, Nicholson and Cotton prevailed with

* See “ Supplementary Despatches of Duke of Wellington,” vol. iv, 1859, pp. 592-601. Letter to the Rt. Hon. H. Dundas, d/- 20th April, 1808.

Lord Canning who was Governor-General at the time. It is now generally recognized that retirement would have been a colossal blunder. Not only would it have meant loss of prestige, but it would have been followed by a deluge of Sikhs, Afghans and Pathans upon Delhi. Edwardes regarded Peshawar as "the anchor" of the Punjab, the removal of which would have caused the whole ship to drift to sea. On the 7th of August, 1857, Lord Canning telegraphed to Lawrence, "Hold on to Peshawar to the last." India was saved.

In his book entitled "Backwards or Forwards," Colonel Hanna makes the somewhat startling statement that nature has rendered the Indus frontier so exceptionally strong, as to merit the epithet, invulnerable.* The greatest military authorities, however, are of opinion that a river is not a good line of defence, in that it can always be forced by an enterprising general. The history of invasions from Central Asia bears eloquent testimony to the fact that the Indus has never constituted a real barrier. The defensive capacity of a river depends to a large extent upon whether the defenders' bank commands the other. This is not the case with the Indus, where the left bank is flat and is frequently commanded by the right. It is true that many of the defects of the old days have been remedied by improved communications in rear, but the natural defects still remain. The Indus is continually shifting its course, and, when in flood, overflows its banks for miles on either side. Even so recently as 1923 the Government of India approved of a scheme for checking the further erosion of this river, which was threatening to carry away the town of Dera Ismail Khan.† Again, the unhealthiness of the Indus valley renders it unsuitable as an area for the concentration of troops. Perhaps the weightiest argument which can be brought forward against meeting an enemy on the banks of the Indus is the disastrous moral effect such a course would have upon the inhabitants of the Indian peninsula.

These defects not only make the river a weak line of defence, but they also render it a bad boundary, if it were ever decided to evacuate the trans-Indus districts. As an example of the difficulties of a river as a permanent boundary, Lord Curzon mentions that : "The vagaries of the Helmund in Seistan, where it is the boundary between Persia and Afghanistan, have led to two Boundary Commissions in thirty years." ‡

* See "Indian Problems," No. 3, 1896, Hanna, p. 111.

† See "North-West Frontier Province Administration Report, 1922-23," p. vii.

‡ See "Romanes Lecture," 1907, p. 21.

Lastly, the "Back to the Indus" cry becomes absurd, when it is examined from the point of view of the inhabitants of the modern North-West Frontier Province. Not only would withdrawal mean loss of prestige, but it would also be a gross betrayal of those peoples to whom we have extended our beneficent rule.

This disposes of the Indus, both as a line of defence and as a permanent boundary, and brings us to a consideration of the present administrative boundary, which we inherited, with all its strategical imperfections, from our predecessors the Sikhs. Lord Roberts, speaking on frontier defence in the House of Lords, on the 7th of March, 1898, stated that, when he was Commander-in-Chief in India, he had never contemplated defending this line. It might serve a useful purpose if we had to deal only with the local tribal problem, but as a line of resistance, to be manned against an invading foe, it was unthinkable.

"A frontier more than one thousand miles in length, with a belt of huge mountains in its front, inhabited by thousands of warlike men . . . seemed to me then, as it does now, an impossible frontier, and one on which no scheme for the defence of India could be safely based." *

Lord Roberts, a firm believer in the Forward Policy, laid great stress upon the necessity for good communications. The money that had been squandered upon useless fortifications should have been spent on the construction of roads and railways. In his opinion, all strategical points should be connected with the Indian rail system, so that, in the event of invasion, troops could be quickly dispatched towards the scene of action. He was firmly convinced that this massing of troops would be the essential factor deciding the conflict.

"Those who attempt," wrote Napoleon, "to defend a frontier by an extended line or cordon of troops will find themselves weak at all points, for everything human has its limits; artillery, money, good officers, able generals, all are limited in action and quantity, and dissemination everywhere implies strength nowhere."

This disposes of two possible lines of resistance, the Indus and the old Sikh frontier. The Durand line, which demarcates the respective spheres of influence of the Amir and the Government of India over the frontier tribes, can be dismissed in a single sentence. It possesses no strategic value at all.† The real frontier we are called upon to defend in India is the mountain barrier. There is

* See Debate in the House of Lords, March 7th, 1898.

† See my article, "The Amir and the Frontier Tribesmen of India," *Army Quarterly Review*, April, 1926, p. 48.

an overwhelming consensus of opinion that, in order to do so, it is essential to cross the Indus and so to prevent the enemy from debouching on to the plains. To defend a mountain barrier, it is necessary to do more than this. The defenders must be in a position to see what is taking place on the other side. It would be sheer folly for us to remain in a state of passive defence while Russia advanced into Afghanistan, and consolidated her position in that country.

Any great Power is ultimately forced to absorb barbaric states contiguous to its frontiers. This is the verdict of history : it is certainly a true account of what the British have been compelled to do in India. The greatest advance from the old red line of the maps was the result of Sir Robert Sandeman's work in Baluchistan. The strategical importance of Quetta must now be discussed.

The proposal to occupy Quetta dates back to the days of General John Jacob of Sind fame, who, in 1856, urged Lord Canning to garrison this important point of vantage. To Jacob the British frontier system was that of an army without outposts. Thoroughly convinced of the importance of the Bolan route, he recommended that troops should be stationed at Quetta, for, as he pointed out, with Quetta in our hands we could threaten the flank of any army advancing upon the Khyber. Lord Elphinstone, the Governor of Bombay, warned Jacob that his proposal would fall on deaf ears, for the disasters of the First Afghan War, 1839-1842, were not easily forgotten by those who controlled the destinies of the Indian Empire. In his letter of the 18th of October, 1856, Lord Canning rejected the proposal on the grounds that, surrounded by hostile tribes and cut off from its true base, the isolated position of the garrison would be extremely precarious.

Unfortunately for those who desired an advance into Baluchistan, the next time the proposal was brought forward it had to face the united opposition of Lord Lawrence and his Council. This time, in 1866, the proposal emanated from Lieutenant-Colonel Sir Henry Green, the Political Superintendent of Sind. The political situation had altered considerably since the days of Jacob. Slowly but surely the Russian giant was advancing across the wastes of Central Asia. In 1865 Tashkent had fallen, and in the same year commenced that struggle which was to end in the subjugation of the Khanate of Bokhara. Green pointed out that the British right to dispatch troops into Khelat territory, whenever that step should become necessary, had been recognized by the Khelat Treaty of 1854. The time for such a step had now arrived. Therefore, to improve the

existing scheme of frontier defence, he proposed that Quetta should be garrisoned and connected by rail with Karachi which would serve as an important base for operations. Green's recommendation was supported by Sir Bartle Frere, the Governor of Bombay, but the members of the Viceroy's Council, as could only be expected of the champions of non-intervention, were unanimous in their opposition to any fresh advances. Lord Lawrence decided that the proposed advance was undesirable, in that it would create a feeling of unrest both in Persia and at Kabul. Concerning the best method of meeting any Russian advance, he wrote :

"The winning side will be the one that refrains from entangling itself in the barren mountains which now separate the two Empires . . . the Afghans themselves, foreseeing this result, are likely in the end to throw their weight on the same side." *

Sir W. R. Mansfield, the Commander-in-Chief, was convinced that the Bolan route could be best defended by holding its eastern and not its western extremity. Lieutenant-Colonel Lumsden, the Deputy Quartermaster-General, pleaded that any advance beyond the existing frontier would mean an additional strain on an already overburdened exchequer. The fairest criticism of Green's proposal was that of Sir H. M. Durand, who advocated the improvement and completion of the Indus frontier group of railways. At the same time he recognized that an advance might be essential in the future.

Ten years passed. The exponents of "masterly inactivity" were no longer predominant in the Viceroy's council chamber; Khiva had fallen before Cossack hosts which were drawing nearer and nearer to the gates of India; and, more dangerous still, the estrangement of the Amir, Shere Ali, had brought us to the brink of war. Sir Robert Sandeman's settlement of the Baluchistan problem, and the occupation of Quetta, in 1876, to which Lord Lytton gave his unqualified support, are too well known to need any description here.

The importance of Quetta, the "bastion of the frontier," is now almost universally recognized. Quetta, or Kwattar, which is the Pashtu word for a fort, occupies a position of extraordinary natural strength and of commanding strategical importance in the centre of the highland part of Baluchistan. Protected on the south-west by the lofty Chehiltan range and on the north-east by the Zarghun plateau, it dominates all the southern approaches to the Indus valley, for, as Sir Thomas Holdich has pointed out, "All roads south of

* See Blue Book, LXXVII (73), 1878-79, p. 13.

Herat lead to Quetta."* Its strategical importance has been considerably enhanced by the construction of the Sind-Pishin railway, which owed its inception to the transport difficulties experienced in the Second Afghan War, 1878-1880. An admirable account of the construction of this famous line and of the heroic efforts of General Sir James Browne is already in existence.†

In rapid succession to the occupation of Quetta came war with Afghanistan, from 1878 to 1880. During this struggle the question of the so-called scientific frontier was broached—should we hold on to the Kabul—Ghazni—Kandahar line? It was an extremely complicated problem that faced both military strategists and administrators. Some extremists advocated the retention of all our recent conquests in Afghanistan; others recommended a complete withdrawal, even to the banks of the Indus. But amongst the moderates the stumbling-block was the retention of, or withdrawal from, Kandahar. The question was further complicated by a discussion as to the relative merits and demerits of the Khyber, Kurram, and Bolan as channels of communication with Afghanistan. How many lines of communication were to be kept open; were we to hold both the western and eastern extremities; were they to be guarded by regulars or by tribal levies?

Lord Roberts was in favour of relinquishing all our conquests with the exception of Kandahar. In his opinion, our resources did not justify our keeping open more than one line of communications. Comparing the Kurram and Khyber routes, he pointed out that Kurram could be garrisoned by British troops stationed on the Peiwar; that the Turis were friendly; that the Shutargardan Pass was closed only for about three months in the year, but could be crossed by an enterprising commander, even in the depth of winter. He was convinced that the Kurram was the best route for attacking Kabul, because the Sang-i-Nawishta defile, five miles from that city, was the only place at which any effective resistance could be expected. On the other hand, the only portion of the Khyber approach ever blocked by snow was the Lataband Pass; and this only for about three days in the year. The great disadvantages of the Khyber route were the unhealthy climate during the intense heat of the summer months, and the fact that an army would be surrounded by extremely fanatical tribes. If Afghanistan ever became a strongly united State, it was his opinion that we should hold either or both

* See "The Indian Borderland," Holdich, T., 1901, p. 51.

† See "The Life and Times of General Sir James Browne," Innes, M., 1905, chs. xv and xvi.

routes, in that they afforded the quickest means of coercing Kabul.

It is interesting to note that Lord Roberts was in favour of the withdrawal of the greater part of the European garrison from the fever-pit of Peshawar to some place on the left bank of the Indus, near Campbellpore. The important point to remember is, that he was prepared to sacrifice both these routes, if only the Bolan and Kandahar were retained.*

The retention of Kandahar was advocated on military, political and commercial grounds. Situated at the junction of roads leading to Kabul and Herat, Kandahar dominated the whole of southern Afghanistan, and was a position of immense strategic importance. Easily defensible, with a good water supply, an essential factor in eastern warfare, its garrison would not be called upon to endure great hardships. In addition, the climate was salubrious; snow seldom fell, with the result that operations could be undertaken at all seasons. A strongly fortified Kandahar would serve as a menace to any troops advancing through Afghanistan by way of Kabul towards the Khyber, for, not only would the enemy's flank be threatened, but forces advancing simultaneously from Kabul and Herat would be isolated. In the opinion of Sir Henry Rawlinson, the greatest Central Asian expert of the time, it was most probable that an attacking force would advance directly upon Kandahar.

"If a foreign army ever does descend upon the Indian frontier, it will be by way of Herat and Kandahar, where the roads are open and traverse districts that have been called 'the granary of Asia,' and not through the sterile and difficult passes between Kabul and Peshawar." †

In the event of war, the occupation of Kandahar would be of supreme importance, since, at that time, it was the first place between the Indus and Herat, at which supplies in any quantity could be obtained. Another argument put forward in favour of retention was that the Kandaharis would prefer British rule to that of the Amir of Kabul. In the past, the bond between Kabul and Kandahar had not been of the strongest; the Amir of Kabul had ever regarded Kandahar "as a sort of milch-cow." Government by the British would mean the advance of civilization and the substitution of law

* Those who agreed with Roberts as to the advisability of retaining Kandahar were Lord Lytton, Sir R. E. Egerton, Major-General Sir H. Green, Field-Marshal His Highness the Duke of Cambridge, Sir William Merewether, Sir Henry Rawlinson and Lord Napier of Magdala.

The opposition included: Lord Wolsley, Sir John Adye, Chinese Gordon, Lord Lawrence and Sir Erskine Perry.

† See "England and Russia in the East," Rawlinson, H., 1875, p. 278.

and order for misrule and tyranny. There was also that ever-important question of prestige, for in Asia the strong never retreat.

An attempt was even made to justify the retention of Kandahar on financial grounds, and it was argued that the wealth and riches of this fair city were so great that it would become a revenue-producing district, bearing the expenses of its own garrison. The majority of minutes written in support of retention entirely ignored the financial side of the question, and refused to acknowledge that permanent occupation would entail a drain of money and troops. When Lord Roberts argued that frontier service was unpopular with Indian regiments, Lord Napier blandly proposed, as a solution, increased rates of pay—to him extra expense was apparently immaterial. The writer's own experience of both Indian and British troops is that they still strongly object to any prolonged service on the frontier, especially in such isolated posts as Chitral.

To pass from the financial aspect to the military, would the occupation of Kandahar have been the end of our advance into Afghanistan? In order to save the garrison from starvation, it would have been necessary to protect the surrounding country; to depend upon supplies from India would have been both a military and financial blunder. The intervening country, between Kandahar and the Indus, was no granary. Kachi, the easternmost portion of Khelat, was known as the *dasht-i-amwat* (the desert of death). Sibi and Dadhar were no better. It was predicted, therefore, that the defence of Kandahar would necessitate the occupation of Girishk and Khelat-i-Ghilzai, in which case the British would be called upon to defend a frontier as unscientific as the one it was proposed to abandon, for both lines ran along the foothills of a wild, mountainous country. Some even went so far as to assert that the British advance would not cease until Herat had been reached, and the greatest difficulty confronting the Forward School would be to know where to stop. Again, in order to defend Kandahar adequately, good roads would have to be constructed connecting it with the Bolan route; and, as General Charles Gordon (Chinese Gordon) pointed out, if we were defeated, these roads would expedite the arrival of hostile forces on the banks of the Indus.

Sir Henry Rawlinson offered a solution in the form of a compromise. He proposed that, whereas we should continue our military occupation of the city, the civil administration should be handed over to a local governor appointed by Abdur Rahman Khan, the new Amir. This might have proved a way out of the political difficulty; the financial problem would have remained unsolved.

Fortunately the counsels of the moderates prevailed. In their eyes the importance of Kandahar was a war-time importance. They saw that our recent acquisitions in Baluchistan would enable us to occupy this position whenever it became necessary; and that we should thus be able to avoid the difficulties and inconveniences resulting from a permanent occupation of the city. The later extension of the railway to New Chaman advanced the British borders to the Khwaja Amran range, beyond which a broad desert stretched to the walls of Kandahar.

It is a deplorable fact that all questions connected with the rectification of the Indian frontier, especially the Kandahar problem, have tended to become party questions. While this heated controversy was being carried on in the East, a general election was taking place in the West, which resulted in the downfall of Lord Beaconsfield and the return of Mr. Gladstone and the Liberals, in April, 1880. On the 11th of November of the same year the Secretary of State wrote to the Government of India expressing his strongest disapprobation of any permanent occupation of Kandahar. The new Government was opposed to its retention on financial grounds, and believed that, although some attempt had been made to prove that the inhabitants were friendly, the Kandaharis would strongly object to the imposition of a foreign yoke, alien in race and religion. To quote from the despatch under consideration :

“ It has been proved that there existed no organized military power in Afghanistan which could resist the advance of the British army, or prevent the occupation of any position in that country. But the difficulties of permanent occupation, or of supporting by a military force any Government imposed on the people by the British power, have been exemplified to the fullest extent. . . . The occupation of Kandahar would, therefore, certainly involve the administration and the military occupation of Khelat-i-Ghilzai on the one side, Farah on the other, and an undefined territory in the direction of Herat.” *

On the 5th of March, 1881, the question of retention was debated in the House of Lords, where it was carried by 165 votes to 76. On the 26th of the same month it was thrown out in the Commons by 336 votes to 216.

The year 1880, which witnessed the return of the Liberals to power, also saw the resignation of Lord Lytton and the arrival in India of his successor, Lord Ripon. The new Viceroy immediately commenced preparations for a retirement from all our recently-

* See Blue Book, 1881, LXX (c. 2776), d/- 11th November, 1880.

acquired points of vantage in Baluchistan to Jacobabad, and even to the Indus. The railway, which had been constructed through the Bolan, was taken up and the materials sent to Bombay, but once more history repeated itself. A Viceroy sent out with implicit instructions to retire from the Bolan, a Viceroy whose earliest acts showed that he was fully determined to effect a retirement, found that, in the face of the steady march of Cossack sotnias towards the oasis of Merv, retreat was impossible. Not only was Baluchistan retained and the railway reconstructed at considerable expense, but an extension of the line to Chaman also had to be undertaken.

Closely connected with the retention of Kandahar was the question of the so-called scientific frontier. The question naturally arises, what was meant by the term scientific frontier in this connection? The writer of this article is firmly convinced that it would be impossible to demarcate on the north-west of our Indian Empire a frontier which would satisfy ethnological, political and military requirements. To seek for a line or zone which traverses easily defensible topographical features; which does not violate ethnic considerations by cutting through the territories of closely related tribes; and which at the same time serves as a political boundary, is Utopian. What was meant by a scientific frontier in the 'seventies and 'eighties of the last century was the best strategical boundary in Central Asia which would serve as a line of defence in case our Indian possessions were threatened by the advance of any European Power. Even military strategists of the highest repute were at variance as to the exact location of this line of defence. Some would have included Herat, which they considered to be the "key to India"; others went so far as to suggest the occupation of such outlying places as Balkh; but it was generally agreed amongst the exponents of the Forward School that the best line of resistance would be the Kabul—Ghazni—Kandahar front.

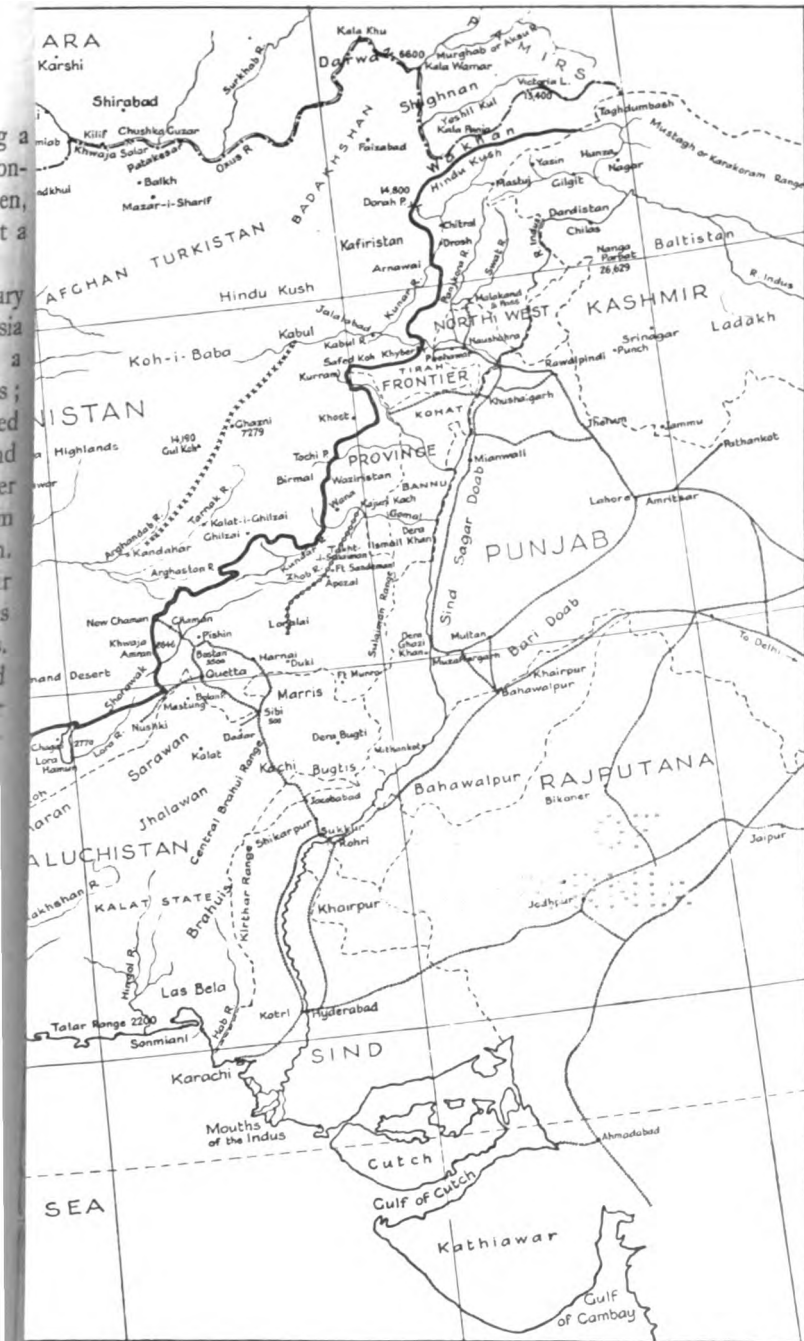
They pointed out that it was shorter and could be more easily converted into a line of defence than any other frontier we had held, or that could be suggested. Neither the right nor the left flank could be turned: the northern was protected by an almost impenetrable maze of mountains, the southern by an impassable desert. If it were connected with the main Indian railway system, troops could be rapidly concentrated on either flank. This rapid concentration of troops was an extremely, if not the most, important factor, for it was infinitely more important for us to be able to dispatch troops to any part of the line than it was to construct immense and

costly fortifications which the enemy might avoid by making a detour. The retirement already described necessitated the abandonment of the scientific frontier, but the question still remained open as to whether or not we ought to advance to this line to meet the projected invasion.

Our scheme of defence against Russia was settled not by military strategists, but by diplomatists. The steady advance of Russia towards the northern frontiers of Afghanistan brought about a compromise between the Forward and Stationary Schools, and it was decided to build up a strong, friendly and independent Afghanistan, which should serve as a buffer state between us and Russian aggrandizement. By means of an annual subsidy, together with gifts of arms and ammunition, an attempt was made to form a closer and more intimate alliance with the Amir of Afghanistan. Although there were times when the relations between the Amir and the Indian Government were far from cordial, yet, so far as Russia is concerned, the scheme has been justified by its results. At the same time the frontiers of Afghanistan were strictly defined by international agreement; and, as long as we controlled foreign affairs, any violation of the Amir's northern frontier by Russia would have been tantamount to a declaration of war.

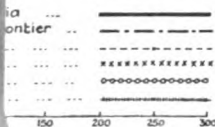
The growing German menace in Asia and elsewhere resulted in the Anglo-Russian *entente* of 1907, the strength of which lay in the fact that Russia definitely recognized Afghanistan as outside her sphere of influence, and pledged herself not to encroach upon Afghan territory, thereby removing the danger of any further Russian advances in the direction of the Indian frontier.

Unfortunately Russian designs upon India were only temporarily suspended by the Agreement of 1907, and the policy of the present Soviet Government, as Mr. Rushbrook Williams has recently pointed out, is professedly directed to carrying out the revolutionary designs of the Third International. The Russian menace of the nineteenth century, when it was feared by some that Cossack hordes would wage war with Indian sepoys on the fair and smiling plains of Hindustan, is most probably a thing of the past. In Bolshevik propaganda the menace assumes a more alarming form, for against its pernicious influence, which has for its object, if not a revolution in the East, at least the destruction of British prestige, lofty mountain ranges, barren *raghzas* and impassable deserts cannot be considered as bulwarks of defence. The assassination of the Amir Habibullah in 1919, the Hijrat movement of the following year, the weaknesses of the Central Asian Khanates, political, industrial, agrarian and



of India 1890-1908.

C.C. Davies



religious disturbances within India, all these have been utilized by the Soviet Government to further its anti-British schemes.

What, then, is the solution to the problem ? It lies in the policy adopted towards Afghanistan. Neither " masterly inactivity " nor " meddling interference " has proved successful. The one has been a shirking of our responsibilities, the other has led to advances which have bred suspicion in the minds both of the tribesmen and the Amir. Our policy should still be to build up a strong, friendly, and united Afghanistan as a bulwark against any aggression from the direction of Central Asia. It still behoves British statesmen, now that Afghanistan has become an independent State, to foster friendly relations between the two countries, for, as Sir Valentine Chirol has pointed out, there can be nothing in common between Islam and Bolshevism, nor can Amanullah, an autocratic ruler, regard with any friendly eye the havoc produced by Soviet Russia in Central Asia.

THE LINES OF COMMUNICATION IN MESOPOTAMIA

(*With Map*)

BY LIEUT.-GENERAL SIR GEORGE MACMUNN, K.C.B., K.C.S.I.,
D.S.O.

I.—THE EARLY PHASE

1. *The Initiation of the Campaign*

THE story of the Lines of Communication in Mesopotamia has yet to be written, and, as that campaign has been selected for official study, it is desirable that the problem of these communications should be understood thoroughly. Major-General Sir Frederick Maurice, who is lecturing on the campaign for the University of London, has given one lecture dealing with this vital matter, but naturally he has not been able to devote any great time to the subject. It is all the more important that attention should be directed to the matter of communications, for there is sometimes a tendency of war historians to assume that the Almighty intervenes with manna from heaven, and that such things as food and supplies come as a matter of course, however difficult the *terrain*. It has also, at any rate in the past, been the tendency of our General Staff, in its eagerness for success and initiative, to slur over the scientific preparations which alone can enable modern armies to fight and modern soldiers to meet the strain that is put on them, and to look on Quartermasters-General who persisted, as so much tiresomeness.

The failure of the Government and the General Staff to understand this need of preparation, is directly responsible for the conduct of the Gallipoli Campaign on a Pevensy Bay footing, and the start on the advance towards Baghdad without any attempt to organize for, or to appreciate, the probable extension of operations.

To understand how the communications broke down, and were then reconstructed, it is necessary to remember the phases, the

changing phases and purposes, of those campaigns. First of all, Indian Expeditionary Force "D" went up the Gulf to capture Basra with two very definite and appropriate purposes, first the protection of the Anglo-Persian oilfields, almost the only source of oil production under British control in what has been described as an oil-war; and, secondly, to prevent the sea mine finding its way into British-Indian waters by way of the Tigris and the Arab dhow. The first force was little more than a reinforced division, which landed, defeated the Turks, and occupied Basra. For the purposes of this article the phases of this campaign may be summarized:—

- (a) The first capture of Basra and the securing of sufficient country round it to carry out the original objects.
- (b) The gradual increment of the force and the attempt to advance on Baghdad, as a counterblow to the evacuation of Gallipoli.
- (c) The failure of that policy with the investment of Kut by the Turks, the arrival of immense reinforcements which could not be maintained up country, and the fall of Kut.
- (d) General Maude's operations to drive the Turks north and his advance to Baghdad.
- (e) The subsequent operations to drive the Turks out of Mesopotamia and to dominate North Persia.

2. *The Port of Basra*

The first consideration in any oversea expedition is the securing of a base in the sense of a port or ports where the army can land its stores and form its depôts. Pevensey Bay is all right for the landing if the landing is in the teeth of the enemy, but to endeavour to use its open beaches for maintenance only results in disaster. Fortunately Indian Expeditionary Force "D" was able to seize a base in the Port of Basra, or more accurately the Port of Ashar, Basra lying two miles inland up a narrow boat-channel. Ashar lies sixty-seven miles up the *Shatt El Arab*, the River of the Arabs, which is the joint channel of the Tigris and Euphrates. For the sake of convenience we will refer to it as the Port of Basra, which indeed it is now called. In the centre of the *Shatt* is a deep sea channel 26 feet deep, but the size of the vessels entering the channel is limited by the bar at Fao, where the *Shatt* runs into the Persian Gulf. By scraping through a couple of feet of mud, ships drawing 19 feet can usually cross the bar at high tide. Vessels of 7,000 tons* and more came into the

* *I.e.* total burden fully loaded.

river, but could not be loaded up to draw more than 19 feet. When the British expedition arrived at the mouth of the *Shatt*, the British warships destroyed the Turkish fort at Fao which was armed with some obsolete Krupp guns. Troops landed in the vicinity and, marching up the right bank towards Basra, defeated the major portion of a Turkish division which opposed them some twenty miles below that place. Basra was then occupied, and the British established themselves in its vicinity and proceeded to develop it as a base.

Forty miles from the mouth on the left bank lies Abadan, where are the works of the Anglo-Persian Oil Company. The oil is brought there from the Persian hills in the Bakhtiari country, by pipe-lines. Four or five miles above Abadan is Mohammerah where the river Karun runs down into the *Shatt*. From just above Mohammerah to the sea the left bank of the river is Persian territory. Twenty miles above Mohammerah on the opposite bank is the town and port of Ashar or Basra, the latter being the modern representative of the city of Sinbad the Sailor. Mohammerah was bombarded by the British during the Persian War of 1857.

On either side of the *Shatt* lie palm gardens which run inland for a mile or so, watered by creeks from which take off innumerable grids of irrigation trenches, so that the gardens are watered twice in the twenty-four hours by the tide, which rises from eight to ten feet, and at every high tide the ground on either side is practically flooded. There are nothing but gardens from Fao to several miles above Basra, and then on either side behind the fringe of irrigated gardens comes the desert—the desert of alluvial mud which after rain becomes impassable.

At high tide, except for small raised patches on the banks, all of which are occupied, there are no dry spots for many miles. At Ashar, both above and below the town, a tidal creek runs back into the desert for a couple of miles or so, at every half-mile, from which the cuts that irrigate the palm gardens take off. These creeks are the highways among the gardens.

At Ashar and Basra there is no water supply, save from the *Shatt*. The well-to-do fetch it in boats by the barrellful from the cleaner centre of the river, the humbler folk drink it from the filth-polluted creeks. There is no inland water from stream or well. Wells, if sunk, only produce water too salt to be potable by man or beast. It was into these conditions that the army entered, crossing or marching round the creeks as best it could, and searching for dry spots on which to camp and form depôts.

The normal ocean trade averaged a steamer and a half a week in 1914, for which a few port lighters of Arab pattern and a few stevedores sufficed.

It was obvious that such a port as this was ill-equipped to form the base of a large army. The main deficiencies were dry land on which to form camps or dépôts, labour to handle shipping, wharves or along-side berthing, water to drink. There was in the country neither metal to make roads, nor timber for building, nor wood for fuel. Three or four miles above Ashar, however, the deep channel left the centre of the stream and ran under the bank for the distance of three-quarters of a mile. Here the German Baghdad Railway had two small jetties at which steamers landed railway material, equipped with a couple of light steam cranes.

3. *The Base in the First Phase*

The small size of the original force made the base organization a simple matter. Little forethought was exercised, and no town planning entered into the heads of the commanders and their staffs. Energetic officers of the Indian Marine and embarkation staff officers were able to compete in an amateur way with what was required. The various departments with very little coordination dumped themselves down on such dry spots as could be found, without much regard to convenience other than immediate requirements. Inter-communication between the disconnected sites was difficult by land, owing to the transverse tidal creeks, while communication by water took place by slow-moving barge, or with a few launches, while a very few motor boats were available for the use of staff and departmental officers.

Even, therefore, for a small force, base work went on slowly and slovenly, and with no thought for what might be to come. The situation called for no immediate development, but it certainly called for a forward planning with existing arrangements considered in reference to a larger development. There was, however, no one in the force with any training in the scientific and business department of "Q" services, which in these days involve the understanding of the commercial handling of transportation problems and their management by officers drawn from civil business life.

4. *The Commencement of Extended Operations*

It was soon evident that the limited offensive originally intended would have to be extended. A Turkish threat to drive the British into the sea was developing, and early in 1915 the British force had

to be increased by two divisions and a cavalry brigade. In April Sir John Nixon had succeeded to the command, and his troops fought, almost as he arrived, the battle of Shaiba on the edge of the plateau west of Basra. This engagement will one day be recognized as one of the decisive battles of the war. Half Asia was watching to see the British put into the sea by the "Faithful." Persia, Afghanistan, the frontier tribes in India, and a large section of Indian Moslems, torn by the Sultan's proclamation of *Jihad*, were waiting on events.

The Turks were investing Qurna at the old junction of the Tigris and Euphrates, forty miles above Basra, and they had marched from Amara to the Karun to strike at Ahwaz, destroying the pipe-line which brought the oil from the Bakhtiari hills to the Anglo-Persian Oil Company's refineries at Abadan.

Sir John Nixon struck out successfully after the victory at Shaiba and loosened the Turkish grip. The arrival of the extra troops did not yet strain the base and communications beyond the limit which energy and improvisation could handle. The attacks, however, called for a better strategical occupation of the country. It was decided to push up the Euphrates to Nasariyeh, which would protect Basra from the west, and to occupy Amara on the Tigris 110 miles above Basra, whence the way to the oil-fields left the river. The extension of the area thus involved put the first strain on the communications.*

5. *The Rivers and other Communications*

The Tigris and the Euphrates differ very greatly in character. The Tigris is navigable at all times to steamers of four-foot draft as far as thirty or forty miles above Baghdad, where rapids begin. The navigation varies. In the low water of the autumn and winter months sand banks are met with, and they constantly change, while in high river the current runs strong. Several large and deep canals and openings to marshes occur at many places, so that no road exists along its banks. There were in fact no roads of any kind in the country. Merchandise is largely carried by country sailing-boats, which run up to 25 tons, flat-bottomed for the Euphrates and marsh country, keeled for the Tigris.

The only steamers on the Tigris were the small fleet of the old-established British firm of Lynch and Co. Some of these were up river in Turkish hands, and the remainder were at Basra. A few

* A third minor line of communications existed up the Karun river for the force at Ahwaz.

were capable of towing a couple of 200-ton barges alongside, with troops on the barges and on the steamers themselves.

The Euphrates was in a far more deteriorated state than the Tigris, having burst its banks several years before the war, and for many miles flowed through the Chaldaean Marshes and the Hamar Lake, before reaching the Tigris by various ineffective channels. On the up-river side of the Hamar Lake a *bund* across the river prevented navigation even in high water, and though this was cut, the river was practically not navigable to anything bigger than the large *baylums* of the country and some small launches,* and was never an effective line of communication. In the summer of 1915-1916 the 12th Division advanced and occupied Nasariyeh, after most difficult operations, and was supplied with great exertions by country boats.

Though the Tigris is navigable at all times, it passes through a remarkable stage termed "The Narrows" between Qurna and Amara. Above Amara it is a mighty river, but at Amara a wide canal takes off a large portion of it into marshes. Below Amara for perhaps twenty miles it still remains a considerable stream, and then two more large canals take off its waters into the marshes on both sides. The navigable channel is now so narrow for many miles that a steamer with two barges can barely get through, and craft coming down are often bumped against the banks to their considerable damage.

II.—THE SECOND PHASE. DIFFICULTIES AND DISASTERS

6. *The Great Increase to the Force*

The advance to Amara, necessary as it was, soon involved a move to Kut, to prevent the Turks sending troops and supplies by the Hai during the period of high water against the isolated force at Nasariyeh. General Townsend then advanced with his Division to Kut, and finally, under circumstances which need not be dealt with here, to Ctesiphon. The withdrawal to Kut and the investment of that place followed, the headquarters of the force escaping with difficulty down stream with the bulk of the flotilla. Suffice it to say in this connection that the maintenance of General Townsend at Ctesiphon, or even at Kut, with adequate supplies was even then quite beyond the capacity of the flotilla. But with the investment

* It was on these marshes that Noah's Ark must have floated after being carried down stream many hundred miles, before coming to ground on some *ararat* or mound near Ur of the Chaldees.

of Kut the relief of that place became imperative. When Townsend advanced towards Baghdad, the 3rd and 7th Indian Divisions were sent from France to Mesopotamia, Sir Fenton Aylmer had been appointed to command the Corps on the Tigris, and more brigades were sent from India. The troops, therefore, to be based on Basra were increased by the equivalent of at least three more divisions. To these were added early in 1916 the 13th all-British Division under Major-General Maude from the Dardanelles, a formation which, though adding immensely to the fighting power of the Tigris force, also added greatly to its tonnage requirements.

But now was to fall on the heads of General Nixon and General Aylmer the Nemesis of an attempt to pour more troops into a port and on to a line of communication than those organizations could possibly carry. It was almost impossible to disembark the reinforcing troops, now amounting to close on four divisions. It was quite impossible to get them up country or to supply them when there. But Kut was crying out that it was starving, and General Aylmer could not resist the call. The result was that three divisions were scattered for two hundred and fifty miles up the banks of the Tigris, marching by detachments along the banks, drinking its foul water, struggling through mud and swamp, or clinging to the decks of crowded steamers and barges. There were no hospital steamers, there was little hospital accommodation, there was but scanty medical *personnel*. But troops and guns had to be got to the front, and get to some extent they did, dropping on the way all formations and components save bayonets and a portion of the guns. Ambulances and adequate artillery ammunition, or anything but the barest subsistence scale of rations were out of the question.

7. *The Flotilla and its Expansion*

The management of the flotilla in the earlier stages was in the hands of the Royal Indian Marine. But the Marine is a sea service with a very small establishment and does not perform duties from which its officers could obtain experience of the business organization of river flotilla and of ports. Its officers laboured with untiring zeal to cope with the difficulties, with little real help from India, and force of circumstances made them quite inadequate to develop the efficiency and high-powered organization now becoming necessary.

The military authorities when called on to make preparations for wider operations up river, and when asking for reinforcements,

failed to recognize that river transport must accompany them in some definite proportion, as an essential part of the ancillary services of every brigade and division.

People who understood the problem if expressed in terms of camels and mule carts, quite failed to realize that exactly the same data must apply to a river which is to take the place of a road.

But with the enlargement of the area and scope of operations, some demands for craft went to India, based on no very definite plan and without any conception of the efficient organization which the use of a big flotilla postulated.

When the Indian Government endeavoured to face the demands, it realized that there were immense difficulties. In the first place, the only navigable river on the west of India was the Indus. Sixty years ago it carried an important marine, but the march of railways had rendered this obsolete and it had long since disappeared. By the irony of fate, the rivers within control of the Indian authorities or within reach of their gold were far away. The Ganges and the Brahmaputra and the Irrawaddy ran into the far distant Bay of Bengal. Farther away still were the rivers of Siam and French China. To get steamers across the Bay of Bengal round by Ceylon and then up the coast into the Gulf of Persia was no easy matter, and during the long monsoon months quite impossible. Steamers alone were no good. To every steamer at least three barges were necessary, which again no one seemed to realize. The bringing of barges across the seas also was no easy matter.

Considerable endeavours were now made to get craft, but usually of the wrong sort, and eighteen stern-wheelers were sent over from Burma, the majority of which were lost at sea. Half a dozen obsolescent steamers were sent from the Nile. But Messrs. Cook's passenger steamers with engines too weak to tow anything up stream were of little use. What was wanted was the Irrawaddy paddle steamer which towed two barges and would carry troops on steamer and barge decks with stores below. Stern-wheelers, except as runabouts, were not wanted, and for a long time no adequate policy was pursued. The Royal Indian Marine was fortunate in having a most enterprising and experienced engineer officer on the Tigris, but his requirements were not put forward. No one realized that for all river flotilla, an efficient repair yard is the first essential. After every trip some work is required, and the trip through the narrows always produced a plentiful crop of injuries to rudders and steering gear. It was little use adding to the fleet unless *pari passu*

powerful repair shops were opened with a large and efficient staff of mechanics, and the necessary slipways.

The India office now commenced building large paddle steamers and tugs, and several hospital steamers specially designed for the Tigris, which was a lengthy proceeding.*

8. *The Aftermath*

The result of the conditions obtaining is well known. General Aylmer and his successor, General Gorringe, failed to relieve Kut. The guts had been torn out of the troops before adequate artillery ammunition or hospitals arrived. Scurvy and beriberi had appeared, and general military failure had produced religious reaction among some of the Moslem troops. The hospital breakdown, which was so widely advertised, took place because there was absolutely no provision to cope with the large number of sick and wounded who had to be evacuated on the empty transport which had brought up troops, animals and stores. Exactly similar reasons produced similar results in the Dardanelles operations. For some months longer a large force was compelled to stay watching the Turks in Kut through the Mesopotamian summer with very inadequate supplies and stores, while the preparations were in progress which enabled General Maude to make his sensational advance to Baghdad. But Sir Charles Monro had succeeded to the command in India, bringing new life, while General Maude, after succeeding General Gorringe in command of the Tigris Corps, replaced Sir Percy Lake as Commander-in-chief.

III.—THE ORGANIZATION OF THE COMMUNICATIONS

9. *The State of Affairs in April, 1916*

It is difficult to tell the story of the re-organization and the ultimate success of Sir Stanley Maude without speaking in the first person, because I was sent out to take over the duties of Inspector-General of Communications. This office existing under the old Field Service Regulations combined the duties of General Officer Commanding Lines of Communication and Director-General of Transportation, and was admirably suited to the river campaign. The War Office had found that matters were getting very serious,

* Six old Thames paddlers found their way out by sea, entirely inadequate to carry passengers, but having wonderful engines were capable of towing a pair of small barges, and did yeoman service.

and was prepared itself to take the situation in hand. As Deputy Adjutant and Quartermaster-General of the Dardanelles Army, I had come straight from the organization of the evacuation with considerable experience of deep sea and small craft, and Sir John Cowans, the Quartermaster-General at the War Office, had written to me that he would back me to the utmost of his power. The C.G.S. and the Q.M.G. in India, both personal friends, wrote in the same strain, and were as good as their word. The Commander-in-Chief in Mesopotamia, Sir Percy Lake, was equally cordial, while his C.G.S. and the Deputy Adjutant and Quartermaster-General were also prepared to give me *carte blanche*. Especially did I appreciate the help from the latter officer, who to a certain extent was called on to put some of his duties into my hands, which he did without *arrière pensée* of any kind, realizing that, coming with the experience I had just had, I was able to bring new ideas and could better disengage the tangled threads.

I arrived in the country ten days before the fall of Kut, which was then recognized to be inevitable.

The actual state of affairs was as follows :—

(1) The Commander-in-Chief and his C.G.S. were at the front. Details of the three new divisions were still struggling up the track along the banks of the Tigris, while their ancillary units were scattered all along the course of the river, often deep in the mud of the flooded banks. At Amara, which was becoming a big administrative centre, many thousands of details and animals of the divisions were concentrated in confusion and squalor.

(2) Medical affairs were still very bad. Every medical unit was being used for purposes other than that for which it was designed or equipped. The casualties had been very heavy, hence the "scandals" referred to. These "scandals" were really due to fighting a war on a European scale of casualties with medical units and establishments designed to meet those usually experienced in an Indian frontier expedition. No hospital steamers had yet arrived on the river.

(3) There was nothing like enough river transport to carry the stores necessary for the troops up river. New scales of rations were ordered, but the extras could not be got up. The heads of services were all in despair, for they could not get the requirements shipped.

(4) Their work was not coordinated by the staff, and they were jostling one with another to get their own stores through.

(5) There were twenty-four ocean steamers in the port which could not be unloaded for want of wharves, labour or lighters, and

departmental officers wandered among them trying to pick badly wanted articles from the bottom of holds.

(6) The accommodation for drafts was quite inadequate, the summer was approaching, drafts moving to the front lost half their number *en route* from disease. There were no canteen stores, and ameliorations of any kind were scanty. Red Cross stores were pouring in, but it was quite impossible to get them to the troops.

(7) Large orders already described had been sent to England for steamers to be built, but these could not mature for many months. A few barges had arrived in sections and the Anglo-Persian Oil Company was endeavouring, somewhat ineffectively, to put them and some flat-bottomed gunboats together in their works at Abadan.

(8) The Government of India had sent over Sir George Buchanan, the eminent port and river expert, to see what could be done in port development and to help in improving the river. He had put forward plans, but had the same difficulty in getting his stores unloaded as every one else and had not yet got to work. Nor had any definite town planning of the base and port yet been settled.

(9) For various reasons the Government of India had not listened to demands for railway construction. Indeed, it was extremely difficult to decide on any railway policy. In the earlier days it seemed a far better plan to develop the river fleet than to try railways; but the impossibility of navigating the Euphrates in its deteriorated state had at last induced them to send over the 2'6-inch stuff which had long been stored for military purposes on the frontier, and a beginning had just been made to lay this line across the desert to Nasariyeh and to cut out the Euphrates altogether.

10. *Development*

Resources were at any rate on their way, and the first thing to do was to relieve the congestion in the port by preventing the arrival of more stores and storeships. This was done by arranging that no demands sent to India by the directors of the departmental services should be complied with unless they had my special code prefix. Otherwise they were to be got ready but not dispatched. If there was any doubt in the matter, I took the orders of the D.Q.M.G. The manner in which this congestion had arisen is so typical of what may occur again that it should be explained. The amount of tonnage that could be unloaded in the port, was barely enough to maintain the force, let alone build up reserves. Nevertheless, G.H.Q. had issued orders to all directors that three months' reserves were to be accumulated. But neither the I.G.C. nor the

D.Q.M.G. of the Force, had spotted that this was a physical impossibility till port facilities were increased. The obedient directors had wired to India for the stores to build up the reserves. India, now thoroughly aroused, embarked the stores without question ; result, twenty-four ocean steamers lying unloaded in the river when I arrived.

Steps were now taken to carry out the following :—

(1) To organize the line from the sea to Sheikh Saad * into sections, in which the section commander had complete jurisdiction over everything within his section, but was not to interfere except on emergency with through traffic. The Base was changed to " Base Section," the Advanced Base to " Advanced Section." The Advanced Section Headquarters was always to move on with the Army, a new intermediate section being interpolated when required.

(2) To complete and improve the marching road along the Tigris, bridging creeks and establishing posts with standing camps, supplies and water chlorinating equipment at every stage (12 miles or so). This saved the waste of native craft in use to carry supplies for each marching echelon.

(3) To hut all depôts and hospitals as fast as could be done.

(4) To start up-river repair yards for steamers, and also coal and oil field depôts.

(5) To group and organize the native craft, and keep watch on their up-river voyage, which usually took five weeks the round trip.

(6) To obtain labour corps of all kinds from India and organize local labour.

In the Port and Base—

(7) To overhaul Sir George Buchanan's port scheme in its relation to the base as a whole, and to coordinate it with other requirements and to push it for all it was worth.

(8) To make out definite demands for port *personnel* and the organization of an adequate pilot service, both sea and river.

(9) To run a basic metalled road right through the port and over the creeks. All metal had to come from India (some wag sent the metal in steamers that could not cross the bar, and thousands of tons had to be trans-shipped in June outside the Gulf. This was one of Bombay's best jokes).

(10) To get pumps and pipes and start a piped water supply to inland flood-free camping grounds.

(11) To set to work in earnest on the erection of sheds for ordnance and supply stores.

* The Advanced Base.

- (12) To develop large repair yards for steamers.
- (13) To erect general hospitals both at Base and up river.
- (14) To make artificial burial grounds above flood level.

It is not necessary to follow in detail the progress on these lines. As soon as Sir John Cowans received my first reports in full, he decided to send me out a strong *personnel* of the newly-formed Inland Water Transport. Brig.-General Gray, an immensely forcible and competent personality, came out with proper *personnel* used to rivers and river craft, all drawn from suitable trade and business classes. A construction company was also sent out, organized from the Clyde, and barges and tunnel tugs in pieces, arrived to be put together.

At Magil, four miles above Basra, the new port was now in progress, where the deep channel left the centre of the stream and ran along the bank for over a mile. Here eventually one wharf 1,100 yards long was completed and several others at various places. Wharves for ocean steamers and separate wharves for loading up river craft were created.

11. *Railway Policy*

The decision to lay a 2 ft. 6 in. line across the desert to Nasariyeh was soon reversed. There was no standard gauge in India, the broad gauge was too heavy to use, but there was a considerable amount of metre gauge track and stock that could be spared. It was decided to lay this line in that gauge and to bring the 2 ft. 6 in. up to Qurna and lay it between that place and Amara, a distance of 70 miles. Between Amara and Sheik Saad large steamers could ply, while up to Qurna even small ocean steamers could go. A subsidiary port was then made at Qurna.

A little later, when General Maude had advanced, this track was replaced by a metre gauge line and the 2 ft. 6 in. was laid from Kut to Baghdad, 104 miles.* Later the 2 ft. 6 in. was replaced by metre gauge between Kut and Baghdad, and the 2 ft. 6 in. went forward to connect Baghdad with the foot of the Persian hills. In every case this narrow gauge was later replaced by the metre gauge as track and rolling stock could be got from India. Later a further development was the bridging of the Euphrates at Qurna and the taking of the metre gauge from Basra to Qurna through to Amara without a break. This enabled a strong fleet of steamers and barges, unsuited to the narrows, to ply in the deep water between Amara and Kut.

* Two hundred and fifteen miles by river.

IV.—GENERAL MAUDE'S ADVANCE AND AFTER

12. *The Extension to Baghdad*

By November, 1916, matters were sufficiently advanced to allow of General Maude starting his brilliant offensive which smashed the Turkish forces before him and carried him to Baghdad. The marching road was finished. The port, though by no means complete, was accommodating far more tonnage, the block of ships had been cleared away, reserves had been accumulated, and, above all, improvements on the L. of C. enabled the drafts to come up the line in fighting trim.

The successful occupation of Baghdad greatly enlarged the problems, especially those of maintenance. Two more divisions were sent from India, and the division on the Euphrates (15th) was now brought up to the neighbourhood of Baghdad. The daily requirements in tonnage were not only quadrupled, but the distance at which it was to be delivered was doubled.

To cut a long story short, the following state of affairs steadily developed.

(1) The Base increased out of all knowledge, its hinterland was dredged and reclaimed, adequate deep sea and river craft piers were made and connected with port railway lines, electric cranes, dock sheds and the like erected.

(2) The navigation of the river was much improved by various engineering measures.

(3) The conduct of traffic and transit was thoroughly organized, whereby transportation to the front proceeded on definite systems :—

- (a) Large and heavy railway stores, and the like, went right through to Baghdad by water.
- (b) Easily handled stores went to Amara by rail, then by boat to Kut and on by rail to Baghdad.
- (c) A permutation of the above allowed certain stores going from Basra direct to Kut by water and thence by rail.
- (d) The railways, as described in the previous section, were developed as fast as metre gauge stock could be shipped from India, and an auxilliary port chiefly to land railway stores was developed at Nahr Umar, thirteen miles above Basra, where the deep channel once again ran close to the bank for a mile or so.

12. *The Final Condition*

As 1917 rolled into 1918, news came of two important movements by the enemy. The Turks and Germans were preparing for the sake of their prestige to drive the British out of Baghdad, and a great attempt was to be made to raise a pan-Turanian movement throughout all the Tartar races to which the Turks belonged throughout Central Asia and parts of Persia.

To counter this, large reinforcements of heavy artillery arrived, the port accommodation at Basra was still further developed, while a British force occupied North Persia.*

When Sir William Marshall,† immediately before the Armistice, destroyed the Turkish Army which lay between him and Mosul and captured that town, the following was the state of affairs.

(1) Twenty ocean vessels at a time could be unloaded at Basra.

(2) The hospitals and depôts had all been hutted, were supplied with pure water and lit by electric light. Vast modern ordnance and supply sheds with a network of port railway lines existed. Much of the swamp land had been reclaimed, and Basra was extremely healthy.

(3) A pilot brig with a highly organized system of pilots expedited the arrival of ocean ships up the *Shatt El Arab*.

(4) A large base workshop with slips and jetties for the repair of the flotilla with several thousand Chinese artificers, worked day and night. A large construction yard put together tugs and barges despatched from England. Small workshops were established up country and the wall on the Euphrates taken under control.

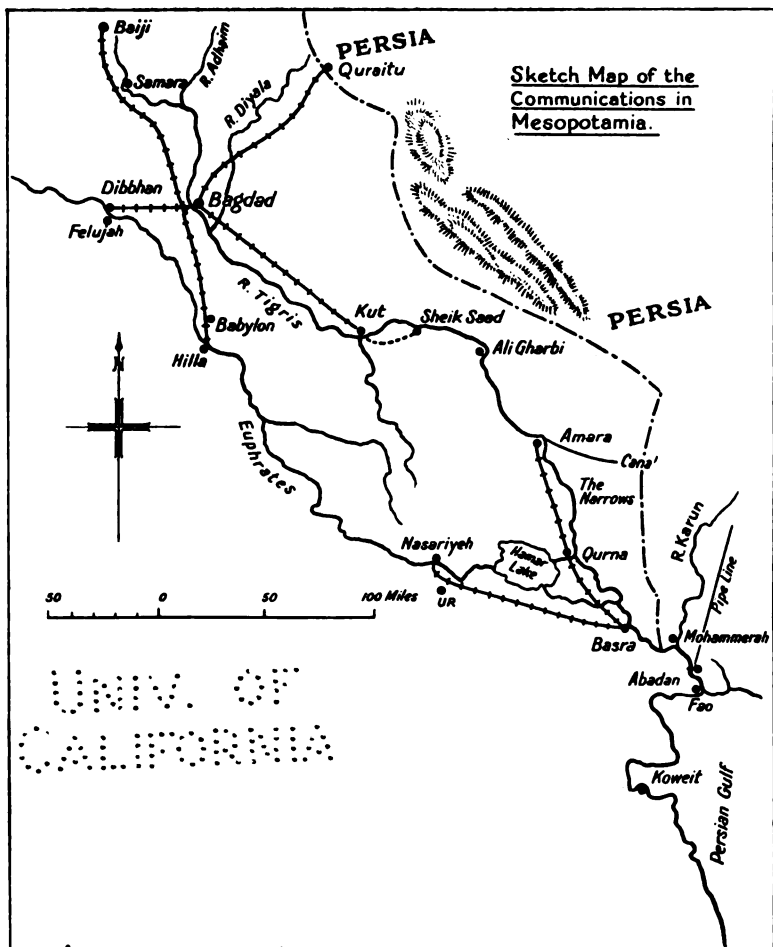
(5) The Tigris was efficiently piloted, channels improved and marked, and the Narrows were lit with electricity for all-night navigation.

(6) Some 300 steamers and launches with over 800 barges now plied on the river.

(7) The metre gauge line ran in two sections, the southern section via Basra from Nasariyeh on the Euphrates to Amara on the Tigris, a total length of 256 miles. The northern section started at Kut and ran through Baghdad to the Persian Frontier, a distance of 236 miles. From the west side of the Tigris at Baghdad the standard gauge German line had been extended up towards Mosul as far as Baiji, 132 miles, and ran also down to Babylon and Hilla

* This involved making a motor road to Hamadan and a line of communications to the Caspian.

† Who had succeeded Sir Stanley Maude in the chief command.



[To face p. 56.]

(56 miles) on the Euphrates, to tap the grain resources of the country, and to Dibbhan on the same river, 48 miles. The 2 ft. 6 in. line, which had served so many pioneer purposes, now ran from Baghdad to Felujah on the Euphrates. A graded motor road climbed up on to the Persian plateau at Kasr-i-Shirin and ran across North Persia via Hamadan to Kazvin, where it joined the Russian road from the Caspian.

Three thousand tons a day could now be delivered at Baghdad, whereas two years before, 250 tons were with difficulty landed at Sheikh Saad, half that distance from the base. A fine fleet of hospital ships plied on the river with hospital trains on all the railways. Fleets of lorries plied up towards Mosul and the Caspian. Refrigerator barges carried Australian meat up to Baghdad, and a fishing fleet in the Persian Gulf brought fish for all the hospitals far up the rivers in the same barges.

The diseases which had so decimated the Army had long died away. By the end of 1917 eight divisions and a cavalry division were being maintained, as well as many L. of C. troops, though early in 1918 two divisions left for Palestine.

So the work, which had begun in 1914 so successfully, and had then developed in misery and disaster, eventually ended in complete success, in the destruction of the whole Turkish Army, and gained prestige which will be remembered in the East for all time. It included in its scope the rescuing of the Assyrian people from the Turks and the relieving of all North Persia from the dire state of famine in which Turkish and Russian Armies had left the districts they traversed.

THE PRELIMINARIES OF THE MARNE

THE FRENCH OFFICIAL ACCOUNT

(With a Map)

THE second volume of *Tome Premier of Les Armées Françaises dans la Grande Guerre*, published by the Historical Section of the French General Staff,* reveals fully what the first volume † led one to suspect, that, instead of being a history of the war, it is really a collection of documents with a thin thread of narrative, little more than a connected précis of the documents.

The book, viii + 842 pages of large quarto, 10½ inches by 9 inches, exception made of its short introductory and recapitulatory chapter of 26 pages, covers only thirteen days, the 24th of August to the 5th of September, the eve of the battle of the Marne. It is accompanied by two equally bulky volumes of appendices, and two cases containing 78 large folded maps. It is a work, therefore, which can only be read at a table, and further demands reference to the two volumes containing the orders of battle and index of place names published earlier.

The appendices must contain nearly all the instructions issued by, and all the messages sent from, or received at, French G.Q.G. in the period. A high percentage of the documents are quite unimportant and undeserving of the space given to them : e.g. Appendices 1991 and 1992 : " Put a reserve brigade at the disposal of the garrison of Verdun," and " The material of the Hauts de Meuse will be immediately brought back to Verdun and Toul by the governors of those two places, who will arrange details between themselves." The maps are reproductions, mostly on the 1 : 600,000 and 1 : 200,000 scale, and give, not the true positions of the troops, but the " situation établie au G.Q.G.," movements being shown roughly by arrows, not by the roads by which they were made.‡

* Paris, *Imprimerie Nationale*, 550 francs.

† Reviewed in the *Army Quarterly*, vol. x, No. 2, July, 1925.

‡ The attached map is an extract of Map 77, which is a brown print of the 1/600,000 edition with the troops marked in red and blue. Their positions and their designations are exactly reproduced.

Being a story derived wholly from the documents of the higher formations it represents the information received and the action taken at G.Q.G. on that information, often erroneous as regards both friend and foe. No attempt has been made to correct the reports of the enemy's doings and of the operations of the French and British corps and divisions in the light of later knowledge, or even to indicate that they were wrong. The information with regard to the Germans, for instance, is given just as it was conjectured at the time: thus on the situation map at 6 a.m. of the 26th of August (Le Cateau) the German III Corps and IV Reserve Corps are not marked at all, and though the II and IV Corps are shown, the German "First Army" is not, the "Second Army" being the right of the enemy here.* The German official account, which is ahead of the French, and the very numerous German publications on the Marne period are not referred to. We find in the text:

"The German forces which attacked the Fifth Army on the 29th of August in the vicinity of Guise appeared to include 3 Active corps, VII, X and Guard, and 3 Reserve corps of the same numbers." There is no amending footnote to tell us that actually the Guard Reserve Corps had gone to Russia, and the VII Reserve was besieging Maubeuge.

Similarly, what is said about the B.E.F. is mostly derived from the somewhat pessimistic reports of the French Mission at British G.H.Q.—of course founded on information given to Colonel Huguet by the British General Staff—and from correspondence between General Joffre and Sir John French. There are a few references to the latter's book and one reference to the British Official History. But the misapprehensions that arose are not corrected, and the British documents are given in translation, the dates and times are sometimes missing, and the signature returned as "*illisible*." The important telephone messages that passed between General Joffre and Gallieni in the crisis just before the end of the retreat are neither given nor summarized, and, as will be seen, the absence of a most important paper is admitted.

The book is an admirable collection of original documents, and will enable the student to place himself in the position of the French General Staff at G.Q.G., but it is not, and does not pretend to be, history. Thus we get the old tales current at the time of the Germans rushing up through the Forest of Mormal "*en camions automobiles*." We are told the legend of "serious attacks" on the British I Corps

* The map for the evening of the same day shows the German III, IV and IV Reserve Corps, but omits the II and the Cavalry Corps.

at Maroilles and Landrecies. The *whole* B.E.F. is engaged on the 26th, "*son aile droite (sic), se trouve réjetée vers le sud.*" All that is said about Le Cateau is :

"A l'aile gauche, le 2^e Corps et la 4^e division ont été dès le matin violemment attaqués sur leurs positions (sic) entre le Cateau et Caudry (sic). Après un dur combat, le général Smith-Dorrien réussit à se décrocher et reprend au debut de l'après-midi (sic) son mouvement de retraite." The French Mission reports to General Joffre that "as a result of the battle lost, the British Army no longer appears to have any cohesion and will have need of serious protection to enable it to reorganize." "*De son côté, le grand quartier général anglais s'est transportée dans le soirée à Noyon.*"

The general tendency of the work seems to be to minimize General Gallieni's share in bringing about the battle of the Marne and to emphasize the parts played by Generals Joffre and Franchet d'Esperey.

The first chapter gives General Joffre's Instruction No. 2, issued on the night of the 25th-26th of August :

"It having proved impossible to execute the offensive manœuvre projected, further operations will be arranged in such a manner as to constitute on our left by the junction of the Fourth and Fifth Armies, the B.E.F. and new forces drawn from the east, a mass capable of resuming the offensive, whilst the other Armies contain the efforts of the enemy for the necessary time. In the movement of retirement," etc.

Thus, from the first, the retirement ordered was a means of gaining time to extend and to strengthen the left wing, neglected in Plan XVII, but not necessarily to envelop the enemy's right. It would seem that the Germans made the trap for themselves ; it was not made by the French Staff for them.

The retirement of the left (Fifth and B.E.F.) is then dealt with from the 24th of August to the 1st of September ; the Sixth Army and Sordet's cavalry from the 27th of August to the 1st of September ; the Fourth Army from the 24th to the 31st of August ; the Third Army and Army of Lorraine from the 24th to the 31st of August ; and the First and Second Armies from the 24th of August to the 3rd of September. No date headings are given on the pages, which make the different chapters somewhat hard to follow and to combine. Next comes a long chapter on the happenings at the fortresses and Lille, one on "The High Command in the Retreat the 26th of August to the 3rd of September," largely a recapitulation of the preceding chapters, and others on "the Entrenched Camp of Paris,"

and "The Army of Paris from 1st to 5th September." The Armies are then dealt with again in succession, and the book closes with another summarized chapter on the High Command from the 3rd to the 5th of September, and the general situation on the eve of the battle of the Marne.

As a specimen of the narrative, we will extract the account of the origin of the battle of Guise, fought to take pressure off the B.E.F.

"During the morning of the 27th of August, the Commander-in-Chief addressed the following message to General Lanrezac :—

"'You expressed to me your intention that as soon as you emerged from the wooded region where the employment of your artillery is difficult you would drive back ("*bousculer*") the troops following you by a counter-attack, well supported by artillery. I not only authorize you to do this, but judge this attack indispensable. The state of your troops is good, their moral is excellent. You must profit by it. To act otherwise would be to diminish their moral and perhaps to compromise the result of the campaign. The Vervins area in which you are arriving is suitable for this operation. It is unnecessary to take account of what the British do on your left.'

"On receipt of this communication, General Lanrezac at once asked G.Q.G. to state precisely that the Fifth Army was intended to counter-attack on the south bank of the Oise, the ground on the north not being suitable for the employment of artillery. Having received the explanation he required, Lanrezac reported that in the execution of the orders he had received, he would stop the retirement of his troops abreast of Vervins and would hold himself ready with all his forces to attack the enemy's columns as they debouched south of the Oise."

General Lanrezac then proceeded to shorten his front, concentrating on his left. The execution of his instructions had hardly begun when General Joffre sent him the following order :—

"From certain information received it appears that portions of the VII and IX Corps which belong to the German Second Army, which is opposed to you, have been left before Maubeuge. It is therefore possible to come to the assistance of the B.E.F. by acting against the enemy's forces operating against it west of the Oise. In consequence, you will send your left to-morrow between the Oise and St. Quentin to attack any enemy force marching against the B.E.F."

The protest of General Lanrezac given in the General's book is not mentioned, although the fact that General Joffre went to him personally next day and gave him another written order is recorded.

It has already been recorded that the situation of the B.E.F. is

represented in pessimistic terms. Thus soon after the above order was given we read : " Towards 6 p.m. Colonel Huguet reports that a division of German cavalry has just entered Péronne, threatening to transform into a rout (*déroute*) the retreat of the British Army. He considers, in consequence, that the situation is exceedingly grave."

From this time onwards there are constant efforts on the part of General Joffre and Colonel Huguet to induce Sir John French to slow down his retreat. But the latter was uneasy about his left, and Major-General Henry Wilson, the sub-Chief of the General Staff, who acted as intermediary with the French, asked Colonel Huguet to inform General Joffre that " it is indispensable that a very strong Army (of six or seven corps in his opinion) should be assembled in rear and to the left of the actual French left, in order to prevent the Allied line from succumbing successively and bit by bit under attacks as powerful as that which led to the *defeat* (*sic*) of the British Army and its retreat."

Finally, on the 30th, Sir John French informed General Joffre that the " British Army is not in a state, whatever the circumstances, to take its place in the front line for ten days [in ten days it was beyond the Marne again in pursuit]," and the intervention of Lord Kitchener to stop the British Commander-in-Chief retiring to the sea had to be invoked. Even on the evening of the 3rd of September, having promised cooperation in the offensive, the British Commander-in-Chief, it is said, " changed his mind during the night under the influence of counsels of prudence given him by his Chief of the Staff." On the other hand, on the 2nd of September, as is admitted, General Joffre declined in writing Sir John French's proposal to make a halt on the Marne. The time of dispatch of this letter is not recorded. A circular letter of the same day addressed to commanders of Armies, *but*, as is stated, *not to the B.E.F.*, contains General Joffre's intention to pass to the offensive as soon as the French forces are on a general line (see map), " Pont sur Yonne, Nogent sur Seine, Arcis sur Aube, Brienne le Chateau, Joinville "—that is, on a convex arc partly behind, partly in front of the Seine. The B.E.F. was to be asked to hold the Seine on the left from Melun to Juvisy, close to Paris, and to attack from this front. The instruction sent to British G.H.Q. " contained only prescriptions relative to the continuation of the general movement of retreat, and excluded all allusion to the ultimate resumption of the offensive " ; but a personal letter which accompanied it suggested that the B.E.F. should retire to the left bank of the Seine from Melun

to Juvisy "*apportant un précieux réconfort aux troupes du camp retranché et cette coopération est la seule qui puisse donner un résultat avantageux.*" Sir John replied that he perfectly understood, and that his cooperation could be depended on.

Then on the 3rd of September "the observations of the British aviators made in the morning [reported through the French Mission] brought to notice that the movements of the German First Army towards the south were suspended, and replaced by a general displacement towards the south-east."

On the morning of the same day, General Galliéni, on hearing that the garrison of Paris had been placed under G.Q.G., addressed a somewhat despondent letter to General Joffre, in which he pointed out that his troops "contained a considerable proportion of Territorials whose manœuvring power was very mediocre, and who were only partly equipped for the field, feebly provided with artillery and ammunition, without first-line transport, parks, train or field ambulances," and offered small hope of holding Paris unless the field armies intervened.

On the 4th, the reports of the new German movement past Paris multiplied, those of the British aviators being more precise than the others. At 8 a.m. General Joffre informed Sir John French that he was sticking to his original plan of "not engaging in combat except on a chosen line with all forces united." But he added, "In case the German Armies pursue their movements south-eastward, thus drawing away from Paris and the Seine, you will perhaps consider, as I do, that you can act most efficaciously on the right bank of that river between the Marne and the Seine."

At 9 a.m. on the 4th, General Galliéni informed General Maunoury that, in view of the direction of march of the German Armies, he intended to move the Sixth Army eastward to strike them in flank, and that it should be ready to march at noon, and gave him the whole of the cavalry available. At 9.45 General Clergerie, Maunoury's Chief of the Staff, telephoned this to Colonel Pellé, the sub-Chief of General Joffre's staff.

General Galliéni then made two proposals to General Joffre—the official record says that there is no trace of them in the archives and that their existence is only known officially by General Joffre's telegraphic reply to the effect that he preferred the Sixth Army should attack south and not north of the Marne. This decision was brought to the notice of Sir John French. That General Galliéni favoured the attack north of the Marne, as carried out, is known from his papers, and the account given by General Clergerie,

in his book.* This does not seem to be in dispute, for the official volume records that General Clergerie protested on the telephone against the southern solution, as it meant the loss of a day, to which the reply was given, "the question has been looked at from this point of view ; but the delay of a day procures a gain of force."

The next portion had better be translated in full :

"The Governor of Paris, as we have seen, had manifested the intention of sending the Sixth Army forward against the enemy's flank, that is to say eastward in liaison with the British, who, on their part, would take ground towards Montereau.

"On the other hand, the Commander-in-Chief considered that the more favourable solution would be to employ the Sixth Army on the left (south) bank of the Marne, south of Lagny. He therefore instructed General Galliéni to come to an understanding with the British Commander-in-Chief for the execution of this movement.

"*Au courant* since the morning with this new intention of General Joffre, and informed soon after by General Galliéni of the movement that the Sixth Army was to execute, Field-Marshal French replied that he would remain in his position south of the Marne as long as possible, ready to cooperate with the Fifth Army (on his right) or the Sixth Army (on his left), or with both, as the situation demanded. On the 5th of September the B.E.F. would face east and could thus advance in this direction.

"Definitely certain, as we have seen, of the march and orientation towards the south-east of the German First Army, General Joffre judged from the situation that it might be advantageous to deliver battle on the 5th or 6th of September against the German First and Second Armies with the united forces of the Fifth Army in contact with the B.E.F. and the mobile force of the entrenched camp of Paris. He inquired, therefore, [telegram 12.45 p.m.] of General Franchet d'Esperey if he thought the Fifth Army was in a state to take the offensive with chance of success. [That is, the initiative came from G.Q.G., and not from the commander of the Fifth Army as sometimes claimed.]

"This communication reached the new commander of the Fifth Army at Bray-sur-Seine, where he had arranged a meeting with Field-Marshal French at 3 p.m. General Wilson, the sub-Chief of the British General Staff, but not the Field-Marshal, attended this, and, after General Franchet d'Esperey had discussed with him the possibility of common action against the German right, at 4 p.m. he addressed a first reply [in writing] to the Commander-in-Chief :

- (1) The battle cannot take place before the day after to-morrow, the 6th of September.
- (2) To-morrow, the 5th of September, the Fifth Army will continue its retrograde movement to the line Provins—Sezanne. The B.E.F. will change direction so as to face east on the line Changis—Coulommiers and farther south on condition that

* *Le Role du gouvernement de Paris du 1^{er} au 12 Septembre, 1914.* The general says that the whole day of the 4th was employed in obtaining General Joffre's assent to the flank attack north of the Marne (p. 15).

its left flank is supported by the Sixth Army, which is expected to be on the line of the Ourcq north of Lizy to-morrow, the 5th of September.

- (3) On the 6th the general direction of the British offensive will be Montmirail, of the Sixth Army, Chateau Thierry, and of the Fifth Army, Montmirail.

"At 4.45 p.m. General Franchet d'Esperey returned to the charge with the following note :—

In order that the operation may be successful the necessary conditions are :—

- (1) The close and absolute cooperation of the Sixth Army debouching on the left bank of the Ourcq north-east of Meaux on the morning of the 6th. It must reach the Ourcq to-morrow, the 5th of September, or the British won't budge.

- (2) My Army can fight on the 6th, but its situation is not brilliant.

No reliance can be placed on the Reserve divisions. Further, it would be good if the *Détachement Foch* could participate in the action energetically, direction Montmort.

"On the other hand, in the afternoon of the 4th of September there were assembled at Melun the Governor of Paris, General Maunoury and General Murray, Chief of the General Staff of the B.E.F., in the absence of Field-Marshal French, who was visiting his troops. At 4.30 p.m. the following note was put on paper as a result of the conference :—

In conformity with the instructions of the French General-in-Chief, the Sixth Army and the B.E.F. [which were to make the offensive south of the Marne] decided to unite their efforts against the German Army which had crossed the Marne.

To this end, during the 5th of September, the Sixth Army will be set in motion towards the east, so that the heads of its columns will be at evening on the Marne between Lagny and Meaux [that is, facing nearly south-east]. On the same day the B.E.F. will change front to occupy the general line Mauperthuis, Faremoutiers, Tigeaux, Chanteloup,* so as to leave the Sixth Army the necessary space.

On the 6th of September the Sixth Army will cross the Marne going east. The same day the B.E.F. will continue its movement, pivot on its right, either the 6th or 7th, so as to face east, its left joining the right of the Sixth Army.

The two Armies will then be ready to act conjointly.

* * * * *

"Before the results of the Melun conference reached the Commander-in-Chief he had accepted the categorical proposals of General Franchet d'Esperey as regards the date of the offensive, the zone of attack of the Sixth Army and the corresponding moves of the B.E.F."

That is, he changed his mind, and now approved of General Galliéni's proposal made earlier in the day, which he had rejected,

* Not one of these four places is given in the *Index Géographique* issued in Tome X; only Faremoutiers is marked on Map 77; the other three will be found on the 1/80,000 and 1/200,000.

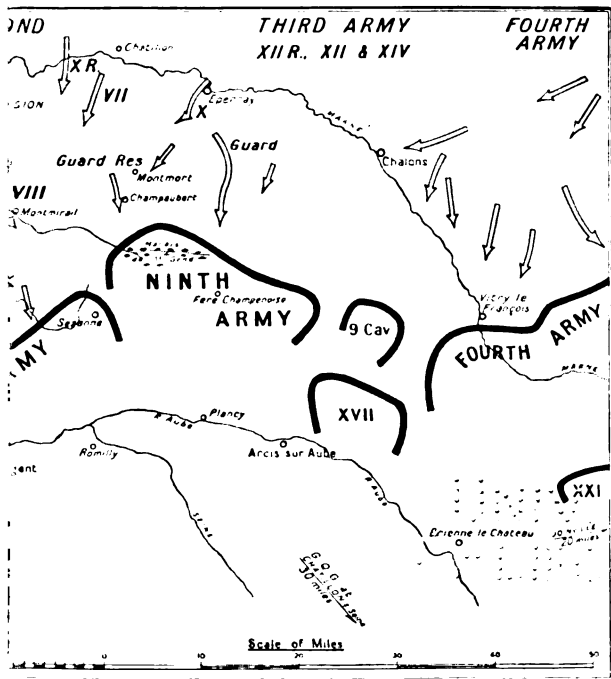
for the Sixth Army to attack north and not south of Marne.

The G.Q.G. order for the Marne offensive was not, however, sent off—by ciphered telegram—to the Armies until 11.15 to Paris until 11.50 p.m. and to the B.E.F. until 12.10 a.m. of the 5th. The messages would then take some time for transmission and decipher. Confirmation was sent by officers in motor-cars, and a messenger appears to have arrived at British G.H.Q. at 3 a.m. before the telegram was available; according to Colonel Clergerie a Paris message arrived only at 2.35 a.m., which indicates grave delay in transmission. As is well known, the B.E.F., in order to take advantage of the cool of the night and concealment, had already marched off. It is less well known that the French Fifth Army had done likewise, the movement beginning at midnight for the X Corps and Reserve divisions, and at 1 a.m. for the other formations. General Foch's troops had also moved in the night, but, when he got the telegram at 1.30 a.m., he tried to stop their march in order to hold the exits of the Marais de Saint-Gond.

Thus it happened that the Fifth Army and the B.E.F., having made an extra march to the rear, were unable on the morning of the 6th to be in the positions indicated by General Joffre. The Fifth Army, indeed, was farther to the south than the B.E.F., but, General Gallieni pushing the Sixth Army on, struck the flank guard of the German First Army on the 5th.

Very few statistics are given, but we are told that the losses of the month of August alone amounted to 20,253 *hommes de troupe* killed, 78,468 wounded and 107,794 missing, that is, a total of 206,515 men *hors de combat* out of an effect of 1,600,000 for the Armies in the field." The total would appear to exclude officers and certainly excluded the fortress garrisons and the Territorial divisions. A footnote, indeed, says that the total only includes "the 21 corps, 3 detached divisions, 10 cavalry divisions and 24 Reserve divisions under the Commander-in-Chief." Another note adds that the totals are different to the figures in the G.Q.G. records; for these were made up on the last day of the month, as "some casualty lists did not arrive until the first days of the following month." The complete total is believed to be about 300,000.

The volume settles two points often misunderstood. Foch's Ninth Army was not collected and interpolated in the line; it was constituted with the forces of the left wing of the Fourth Army and consisted of the IX and XI Corps, the 9th Cavalry Division and the 52nd and 60th Reserve Divisions. As it was to these formations



[To face p. 66

that General Foch issued orders on the 5th of September, no additions from the eastern wing were apparently made to it.

It has been a legend that the 8th Division of the IV Corps was withheld from General Maunoury and the battle of the Ourcq because it was required to support Sir John French's left. The volume states :

"The 8th Division arrived at Paris on the 5th of September, and billeted in the area Asnières, Gennevilliers, Colombes [north-western suburban area]. General de Lartigue, its commander, considered that, on account of the fatigues due to two days' battle in Lorraine,* and long journeys in the train, the 8th Division full (*bourrée*) of reservists recently arrived at the dépôts, and without sufficient officers and non-commissioned officers [many had fallen], had only a feeble offensive value, and to engage it too soon would be to risk disorganizing it."

* The story of the destruction of the 8th Division was given by Commandant Grasset in *Virton* (reviewed in the *Army Quarterly* in January, 1926).

INDIANIZATION AND THE INDIAN SANDHURST COMMITTEE REPORT

BY COLONEL G. M. ORR, C.B.E., D.S.O., Indian Army (retired)

IN 1918, while the war was still in progress, Indians were declared eligible, on equal terms with British youths, to receive the King's Commission in the Indian Army—a privilege which carries with it the power of command over British as well as over Indian troops.

To give effect to this declared policy of Indianizing the officer cadre of the Indian Army, a Cadet School for fifty cadets was opened at Indore in October, 1918, and ten vacancies a year were allotted to Indian youths at the Royal Military College, Sandhurst. After one year the Indore College was closed, thirty-nine youths having been granted the King's Commission. Eighty-three boys had gained admission to Sandhurst up to April, 1926: the percentage of failure of these boys had been approximately thirty, the corresponding failure among British boys being three.

Indian opinion, as expressed in the Indian Legislative Assembly, has shown itself dissatisfied with the methods by which the Government is carrying out its pledge of Indianizing the King's commissioned ranks of the Indian Army. It says in effect, that ten Commissions a year in twenty-one regiments of cavalry and one hundred and sixteen battalions of pioneers and infantry are not enough; it says further, that the eligibility of Indians for the King's Commission should not be restricted only to the cavalry and infantry arms of the military forces.

The Committee's terms of reference were (a) "to inquire and report by what means it may be possible to improve upon the present supply of Indian candidates for the King's Commission both in regard to number and quality; (b) whether it is desirable and practicable to establish a military college in India to train Indians for the commissioned ranks of the Indian Army; (c) if the answer to (b) is in the affirmative, how soon should the scheme be initiated and what steps should be taken to carry it out; (d) whether, if a military college is established in India, it should supersede or be supplemented by Sandhurst or Woolwich so far as training of

Indians for the commissioned ranks of the Indian Army is concerned ? ”

The genesis of the Committee lay in a resolution passed by the Legislative Assembly on the 19th of February, 1925. This resolution required a committee to be appointed first to investigate and report on two points : (a) whether a military college should be established in India, and (b) whether such a college should supersede or supplement Sandhurst and Woolwich ; and second, to advise at what rate Indianization should be accelerated for the purpose of attracting educated Indians to a military career. In response to this resolution an undertaking was given to appoint a Committee “ to examine the means of attracting the best qualified Indian youths to a military career and of giving them a suitable military education.” The actual terms of reference to the Committee as stated above give a latitude which appears to go beyond the original intentions of the Government, as expressed in its undertaking to appoint a Committee.

It might be said that the first terms of reference restricted the Committee to an inquiry into methods of improving the supply of candidates for the existing vacancies and not to methods of increasing the number of Indian King's commissioned officers. But the subsequent terms of reference allow inquiry into methods of organizing colleges in India which are obviously meant not only to receive more than ten candidates a year, but also to train them for branches of the Service other than cavalry and infantry.

The Committee has taken advantage of any latitude there was. It has recommended methods, including the immediate establishment of a Sandhurst in India, whereby in twenty-five years' time half the total cadre of officers of the Indian Army would be Indian King's commissioned officers, and, further, that Indians should be made eligible to be employed in the artillery, engineer, signal, tank and air arms of the Army in India.

The Government of India in issuing the Committee's Report expresses no opinion, but prefixes a foreword which under the circumstances is significant. It states that “ the Government considers it necessary to emphasize that neither they nor His Majesty's Government have yet formed their conclusions on it, and that these conclusions must necessarily take account of certain factors of which it was not within the province of the Committee to undertake a complete survey. For example, although the Committee's recommendations in themselves are designed primarily with a view to Indian conditions, the problems of the recruitment

and training of King's commissioned officers, for whatever Service, are essentially an Imperial concern, and any proposals reacting on them will require close scrutiny by His Majesty's Government and their military advisers. Again, the Government when called on to deal with any scheme of increasing Indianization extending over a number of years must leave themselves free to consider whether the basis of that scheme offers the surest line of advance towards the creation of a Dominion Army, or whether alternative methods, which did not fall within the Committee's terms of reference, might not more profitably be explored. The Committee's report will thus be used as a starting-point for discussions with His Majesty's Government, to whom the Government of India will in due course forward their considered views on it."

It will be well, before going further, to try and make clear the extent of the responsibilities of the Government in India, of the India Office, and of the War Office in questions of policy affecting changes in the Army in India. The Army in India is under the control of what may be called a joint administration—the India Office in Whitehall and the Government of India in India. The control is subject, however, to certain conditions in matters of high policy. For instance, in any question affecting the Army Council's responsibility for the British units of the Army in India the Secretary of State for India would consult the War Office and would then bring the question before the Cabinet for approval. Thus the quality and the number of Indian youths to be admitted to Sandhurst or Woolwich ; the extension, with all its implications, of the privilege of power of command over British troops ; methods of officering Indian units which will have to serve alongside British units ; and changes in organization or composition of Indian units—these are all matters affecting the responsibilities of the Army Council and must have a reaction on the policy of the Cabinet after it has obtained further advice from the Committee of Imperial Defence. Then Parliament will be called upon to decide whether or not this policy is to be adopted. Unfortunately, neither members of Parliament nor the British people who elect them, are by any means fully conversant with Indian problems. One has heard a great deal about Indian nationalism, and one is apt to confuse self-government in India with self-government in a nation. It is necessary to reiterate the fact that India is not a country consisting only of one nation or race. It is a continent, in size equal to Europe without Russia. It no more consists of one nation than does Europe. Fifty millions of Bengalis, twenty millions of Mahrattas, twenty-four

millions of people who speak Telugu, sixteen millions speaking Punjabi, the people of Rajputana, and four millions of Sikhs—these might each claim to be a nation. Three hundred and twenty million people speaking with some two hundred different tongues having races in their midst showing clear lines of cleavage, peculiar features and distinctive characteristics—these do not form a nation. The religions of India also affect the life and character of its inhabitants to quite a different degree to that of the Christian peoples of Europe, however divided they may be. The antagonisms of two hundred and seventeen million Hindus and seventy million Mahomedans are quite irreconcilable, and incomparable with the ephemeral passions which have caused Protestants and Roman Catholics to war against each other in the past. Even on the basis of a common religion there can be no nation of Hindus, for Hinduism teaches that there is no brotherhood and no equality, while in the same country Mahomedanism teaches that, so long as it is within the brotherhood of Islam, all races and classes and conditions may be equal.

How many of the British people or even of members of Parliament understand the composition of the Indian Army units and know the principle on which it is based? The lesson of the Indian Mutiny—a lesson which the passage of time was beginning to blur, but which was remembered when the reorganization of the Army took place after the late war—was that no unit should be composed wholly of Hindus or wholly of Mahomedans. It is true there are some exceptions: omitting the twenty battalions of Gurkhas, which are outside the Indianization policy because their men are neither natives of India nor British subjects, there are still seventeen battalions each of one class,* out of a total of twenty-one regiments of cavalry, nineteen batteries of artillery and one hundred and sixteen † battalions of pioneers and infantry.

How many outside India appreciate the actual position of the King's commissioned officers of the Indian Army? From the day they join their Indian unit, one year after receiving their Commissions, they command neither "troops" nor "platoons" like their brother officers of the British Army, but at once become squadron or company officers, deputies to their company commanders until such time as they themselves obtain command of a

* 1st, 2nd, 3rd battalion of 11th Sikh Regiment; 1st, 2nd, 3rd and Training Battalion of 17th Dogra Regiment; 1st, 2nd, 3rd and Training Battalion of 18th Garwhal Regiment; 1st Kumaon Rifles; 1st battalion 4th Hazara Pioneers; 1st, 2nd, 3rd and Training Battalion of 3rd Sikh Pioneers.

† Including Training Battalions.

company. Those whom the public know as "Indian Officers" hold, not the King's but the Viceroy's Commission; they have risen from the ranks and as "*Jemadars*" and "*Risaldars*" or "*Subadars*" command the "troops" and "platoons" of the Army, but never any higher formation unless temporarily by the fortune of battle. They are also of the same class and creed as the men whom they command.

It must be repeated that the strength of the religious prejudices of the followers of the two great religions of India, Hinduism and Mahomedanism, is such as to be inconceivable to those who have not had first-hand experience of India. It is because Britishers are free from such prejudices and communal jealousies that the inhabitants of India are prepared to give to them their confidence and to rely on their impartiality. It is because under the social system of India, particularly under Hinduism, strong personal pressure can be relentlessly applied to a co-religionist that a native of India mistrusts the impartiality of another native of India. The discipline of a class company of an Indian unit rests on the confidence of the ranks not only in the efficiency and power of leadership of the commander, but also in his impartiality. Where the latter is absent, discipline must inevitably weaken. An Indian youth trained in the British spirit of "playing the game," and personally free from prejudices of caste, will find the forces of his environment too strong to resist. From the moment that Indian King's commissioned officers begin to be in command of squadrons and companies, the Indian Army, first here and then there, will begin to lose its efficiency. The result will react not only on India but on the British nation, which has its responsibilities for the defence of India. For this reason the writer believes that the pledge to Indianize the Indian Army was to hazard an ill-advised experiment.

In parenthesis it may be said here that the above is the basic reason why many officers, serving and retired, of the Indian Army, whose pride it has been to serve and whose hope it has been that their sons would follow in their footsteps, cannot commit their sons to a career in a service, the discipline of which they feel convinced is jeopardized.

But the pledge has been made and facts must be faced.

Responding to a pressure which was purely political the Government of India has introduced Indianization into the Army. Rightly regarding it as an experiment, the Government wished to test out the hypothesis that Indian youths could be trained up to the necessary standard of efficiency. The authorities, no doubt, realized that

owing to the defects of the educational system of India, especially in the training of character, the Indian youth would suffer from disabilities side by side with British youths. In order to allow time in which to make up lost ground, Indian youths, therefore, enter Sandhurst a year older than the British students. In practice it has been found that other disabilities, such as the expense of sending Indian boys to England, the doubt in the minds of parents as to whether their sons would go through a military career successfully, the feeling that failure would militate against entry into other careers, the anxiety of parents as to the welfare of sons sent away to a far distant country for two years amidst surroundings and customs entirely foreign to them, have tended to limit the number of the competitors even for the ten vacancies a year at Sandhurst. So far as the test of efficiency has been applied at Sandhurst, the percentage of failures has been high. In 1923, by which time only a few boys had reached the stage of being posted to Indian units, the Government introduced what is known as the "eight units scheme." In Lord Rawlinson's words, this was "to give Indians a fair opportunity of proving that units officered by Indians will be efficient in every way." The idea was to build up in these particular eight units an officer cadre from the bottom. The plan was that Indian youths after completing their year's training with a British unit should be posted to these units, and that Indians should be gradually transferred from other units so as to fill up the appointments for which they were qualified by their rank and length of service. By April, 1927, there was an average of four to five second lieutenants and lieutenants in each battalion.

The scheme is believed to have been received with disfavour by the Indian ranks of the units selected. It is believed that the Indian youths themselves would much prefer to be posted to other battalions. The Indian politician apparently takes the view that it is a slur on Indians to segregate them in certain battalions. Whether this particular test has proved a success during its three years' trial is not known. But the Committee considers the test as "an unfair one and too severe to impose upon the first generation of Indian King's commissioned officers who . . . already have sufficient disadvantages of other kinds to overcome." They go on to say, "The scheme is also in conflict with the principle of cooperation between British and Indian. . . . Both for psychological and practical reasons the continuance of the scheme can only conduce to failure."

To return to the Committee's recommendations. The Committee has answered the first of its terms of reference by saying that

more Indians would be attracted to a military career if the present policy of selecting candidates from communities which furnish recruits for the Army were abandoned, and that entrance to the Army should be made open and competitive ; that a greater measure of publicity should be given to the advantages of a military career as a King's commissioned officer ; that a larger number of vacancies would attract a larger number of candidates ; that the quality of candidates would be improved by a system of education which included training of character, and that, generally, an acceleration of Indianization would bring in its train candidates for Commissions not only in greater numbers but of better quality. It answers the second question addressed to it to the effect that a Military College in India is desirable because there will never be more than a few parents who will care to send their sons to England, and because the authorities in England have good reasons for setting a limit to the number of foreign students who can be absorbed without changing the character of the educational institutions. The Committee apparently is satisfied that it will be practicable to establish a college in India so long as " no pains are spared to place the machinery of the Indian Military College on the highest plane of efficiency which India can attain."

Having thus answered the second term of its reference in the affirmative, the Committee outlines its scheme under which a Military College to accommodate a hundred cadets should be ready to take the first quota of thirty-three cadets in 1933 for a three years' course. After 1933, the proposal is to increase the number of cadets by twelve every three years. Meanwhile, vacancies for Indians at Sandhurst should be increased at once to twenty, with further annual increases of four up to 1933, after which only twenty vacancies should continue to be reserved in order that the maintenance of the Imperial connection in military affairs may be secured. By these means the Committee looks to having 1,669 Indian King's commissioned officers by 1952, or half the total cadre of officers in the Indian Army. There is then the further recommendation to which allusion has been made, namely, that Indians should be made eligible for Commissions in the other arms, and it is suggested that eight vacancies for Indians should be reserved at Woolwich and two at Cranwell.

The recommendation to have a three years' course at the Indian Sandhurst was the result of conclusions arrived at from a report by a special sub-committee which visited the military institutions of Great Britain, Canada, the United States of America and France.

This sub-committee reported that, "while India is on the same footing as England and France in that she requires a regular supply of officers for service in a large standing Army, she has something in common also with Canada and the United States in that the civil educational system is at present defective and cannot be so improved in the near future as to ensure that the generality of cadets . . . can be turned into really efficient officers after only a short period of military training." The first year of the proposed course, therefore, is to be devoted mainly to academic study so that the young Indian may have the opportunity of making up for the deficiencies of the Indian educational system. The second and third years are to be devoted mainly to military training although academic studies are to be continued, so that those who may be found unfit for Commissions can continue their education at a University and so join some profession other than that of arms. It is for this reason that the Committee lays stress on the importance of the academic standard attainable at the end of the course being so framed as to secure specific recognition from the Universities.

On the face of it, the Committee's recommendations seem to be the natural corollary to the introduction of an Indianization policy into the Army. The Government of the day has to deal, therefore, with a harvest most rashly sown by one of its predecessors, and now has the unenviable task of explaining how rash are the methods recommended for carrying out a pledge which was in itself incredibly rash.

Attention will be focussed on the two principal recommendations whether they are considered outside the terms of reference to the Committee or not. They are that Indianization should be so accelerated that half the officers in the Indian Army would be Indians in twenty-five years' time, and that Indians should be made eligible for the King's Commission in the artillery, engineer, signal, tank and air arms of the Army in India.

It would seem as if the Committee had been influenced by the precedent of the Lee Commission, whose recommendations to bring about a fifty per cent. proportion of Indians in the Civil Services have been generally accepted. Sir Reginald Craddock has lately pointed out in the columns of *The Times* how fallacious is an analogy between conditions of service in the Civil Administration and in the Army. The results of failure in command in war are irretrievable—the result of failure in civil administration can be localized, and there are ways of relegating the less efficient members of a civil service to unimportant charges which have no counterpart in a

modern army, if it is to be efficient. Further, Indians have been tested for fifty years in the fields of civil administration, and it was forty years before their number reached ten per cent. of the total.

It has already been said in the earlier portion of this article, that the Indian rank and file, in which must be included the Viceroy's commissioned officers, will never have confidence in another native of India as an officer, even if he is professionally efficient. There are many who hold that so few Indians will come through the mill, or stay the course, that even fifty per cent. admissions to the officer ranks will in the end only produce solitary examples of battalion commanders and but few squadron and company leaders. There are certainly traits in the character of the natives of India which are familiar to any one with real experience of India, and which go a long way to bear out this contention. Sir Reginald Craddock mentions them in the articles already referred to. He says that the average Indian's adolescence is earlier, his prime is earlier, and his decline is earlier than is the case with the European; that they will be overcome by a sort of inertia just at the time they ought to be eligible for promotion to the higher posts; that the martial races are educationally backward, and that when they take to higher education they quickly drift towards more otiose avocations; that the educated middle classes have two weak points in the very qualities most required in an army—namely, a faculty for quick decision in emergency and a readiness to take responsibility.

Sir Reginald Craddock does not hesitate to dub the recommendations as incredibly rash, and evidently believes that no Government will take such a leap in the dark. It is most sincerely to be hoped that he is right. Any increase in the number of King's commissioned officers, particularly if in the process of the experiment there are grave doubts of their ultimate efficiency or of the effect on the Indian rank and file, is one of those matters of Imperial concern which affect the responsibility of the Army Council, the Committee of Imperial Defence and the Cabinet. Under the same category, it appears to the writer, comes the recommendation of the Committee to make Indians eligible for Commissions in other arms of the Army in India.

The Government of India, it will be remembered, also referred to alternative methods of increasing Indianization, when creating a Dominion Army. One of the means by which, in response to the demands of the politicians, the peoples of India have been given an opportunity to show their capacity to defend their country was the institution of a Territorial Army. It is intended to be a second

line to, and a source of reinforcement for, the Regular Army. It consists of two categories, the university training corps battalion whose purpose is mainly educational, and provincial battalions. These latter are each affiliated to a Regular regiment and their members accept full liability for service. Up to April, 1927, twenty battalions have been constituted. One of the great problems connected with the development of this force is the provision of adequately trained officers. At first, as a provisional arrangement, their officers received two Commissions: an honorary King's Commission in the Indian Land Forces, and for purposes of command, a Viceroy's Commission as an Indian officer in the Indian Territorial Force. The Shea Committee in February, 1925, recommended that the platoon commanders should get Viceroy's Commissions of the rank of *Jemadar* and *Subadar* (as in the case of the Regular Army), while the officers of the higher grades should get Commissions as second-lieutenant, lieutenant and captain granted by the Governor-General in the name of His Majesty the King. In the Indian Army List for April, 1927, they are all shown as either honorary second-lieutenants or honorary lieutenants. At present, officers of the Regular Army are provided for the command of battalions and companies. It would seem that this is a field offering an alternative which might be profitably explored.

The considered views of the Government of India on the recommendations and the eventual decision of the Government after consultation with the Army Council and the Committee of Imperial Defence will be awaited with interest if not with anxiety.

FURTHER EXPERIENCES OF A COMMISSARIAT OFFICER WITH THE BRITISH ARMY, 1814—1815

BY H. A. DALLAS

IN the October (1926) and January (1927) issues of the *Army Quarterly* two articles were published dealing with the experiences of Alexander R. C. Dallas as commissariat officer during the Peninsular War. In the following article some account of further experiences covering the critical year 1815 will be given.

The last article closed with the siege of San Sebastian. After this siege the cavalry was ordered to take up its quarters in the towns of Azpeytia and Azcoytia, at the foot of the Pyrenees, not very far from Bilboa. As it seemed probable that the troops would pass the winter there, Dallas and three or four officers arranged to explore the coast and visit Bilboa. Before starting he took care that all supplies should be in order during the ten days that he would be absent; he informed the adjutant at what places forage might be procured, and left instructions that nothing was to be done without consulting this officer.

The trip was a delightful one, but on his return a very unpleasant experience awaited Alexander Dallas. He learned that the Alcalde (the chief magistrate of the city of Azpeytia) had been applied to by the commander of a regiment of Spanish cavalry, on the march in the neighbourhood, for a writ authorizing the collection of forage, that a Spanish foraging party had been sent to some of the places indicated by Dallas. The result was that the two foraging parties met at the same spot, and of course this was reported to the adjutant. He was a man of hot temper, and sent a message to the Alcalde summoning him to his presence. The Alcalde, very properly, refused, saying that the adjutant might call on him if he wished to speak to him. The adjutant then sent a corporal and two dragoons with orders to bring the Alcalde, by force if he resisted. This unwarrantable action caused great commotion in the city. The chief magistrate of Azpeytia was seen being marched through the streets between two British soldiers with drawn

swords. Dallas was horrified and remonstrated with the adjutant, when he heard what had occurred, and as the latter would not consent to apologize, he went himself to see the Alcalde, who refused to see him, having already sent a report of what had happened to the Commander-in-Chief of the Spanish Army, Don Carlos de Espana.

A grand review was to be held at that time by Sir Stapleton Cotton, and Dallas, in full uniform, attended the review. As he came on to the field an officer rode up to him and, after asking his name, handed to him a letter from the Commissary-General. This letter informed him that he was under arrest, that he must give up his charge to the officer who brought the letter and proceed at once to Renteria. Although no reason was given for this, Dallas discovered later that Don Carlos had dispatched an officer direct to the Duke of Wellington, demanding reparation for the insult to the Alcalde, and that the Duke had sent an order that the officer in charge of the cavalry at Azpeytia was to be put under arrest and made to give an account of his conduct.

Dallas obeyed the order at once, and from Renteria he wrote a full explanation, confident that he could make it clear that he was not the person to blame. Two weeks passed and he received no reply. Friends in Azpeytia rode over to Renteria to condole with him or to laugh over the mistake ; but to Dallas it was no laughing matter. After more than a fortnight Sir Robert Kennedy passed through Renteria and talked the matter over with him, but his visit was not cheering. He said that the Duke would not hear any explanation or excuses, and he was afraid there was risk of a court martial being ordered.

A few days later Sir Stapleton Cotton, who commanded the artillery, passed through Renteria. He had been a good friend to Dallas, who took this opportunity to explain to him his position. He was much amused at the untoward predicament and promised to use his influence with the Duke. This he must have done effectively, for about a week later Dallas was sent a letter releasing him from arrest and ordering him to return to his charge of General Vandeleur's brigade of cavalry.

During the winter 1813-1814 the cavalry under Dallas' charge was quartered in the neighbourhood of St. Jean de Luz. As he could not obtain a house he pitched his tent. One night he left it in the care of his trustworthy servant Andres, and slept in a friend's quarters. The servant slept soundly and did not hear the curtain being raised and boxes withdrawn. When Dallas returned in the

morning he found that all his linen, and a box containing his public papers, vouchers, etc., had been stolen. His brother officers made generous contributions out of their wardrobes to supply his loss in linen, and he says, "I believe I had a better kit than before the robbery; but the loss of the papers was very serious." The matter was duly reported to his immediate superior, Commissary-General Dalrymple, and to Sir Robert Kennedy. Some weeks later a soldier brought him a MS. paper which had been wrapped round some article he had purchased of a sutler. This proved to be one of his vouchers, and Dallas at once made inquiry and found that a Spaniard had discovered a lot of papers on a hillside some miles off. Dallas went to the spot immediately, where he was lucky enough to find many of his precious documents scattered about and much damaged.

After some pleasant months spent in the French city of Dax he was promoted Acting Assistant-Commissary-General on the 22nd of April, 1814, and in due course this was confirmed by the regular Commission and he became Assistant-Commissary-General. He was then just over twenty-three years of age. The record continues :

"Together with this satisfactory information I was directed to proceed with all possible dispatch with post horses to meet an Army of four thousand men under Lord William Bentinck. These troops had been sent from Malta, had landed at Alicante and were marching upwards to join the main army in France. I was desired to make all speed, in order if possible to reach Zaragoza by the time they arrived there; and I was to take charge of their supplies and bring them on. I found it would be next to impossible to get to Zaragoza by the day they arrived. I started two hours after I received my instructions, accompanied by my faithful Andres. . . . I had to get three horses at every stage, two for ourselves and one for the guide; but we passed through every difficulty, and I never drew bridle until the second night, when I took three hours sleep at Tolosa. To be sure the horses had an easy amble, and as the saddles were mostly bull-fighting saddles, with high pommels and large shovelled stirrups, it was not difficult to take a nap. In this way I passed through those splendid passes that lie between Tolosa and Pampelona, and I grieved when I woke up to find by what I saw, the beauties that I might have seen if I could have kept awake."

The difficulty in obtaining horses increased; at last he was obliged to put up with two great, strong, hard-mouthed mules, which never got into a trot. Night overtook him on a dreary road, with no house to be seen. Eventually he found a shed which belonged to an old man, and he lay down to rest in a loft above a stable, reached by ladders inside and outside. Presently he was awakened

by his servant Andres, who in a low whisper told him that he had overheard a conversation between the owner of the house and three or four other men which led him to think that they were intending to murder and rob Dallas. He had, therefore, led out the mules quietly and come to warn him. Having silently slid down the ladder Dallas mounted a mule, and he and Andres moved off as fast as these slow creatures could carry them. They came upon the troops whom Dallas had been sent to meet, at a place called Tudela, one day's march beyond Zaragoza, and he accompanied them to St. Jean de Luz, where he gave up his charge and proceeded to the headquarters at Bordeaux to report himself. Here he met again his kind friend Sir Robert Kennedy, who told him he was about to appoint him to a very honourable distinction.

"It had been arranged that while the infantry would embark at Bordeaux and proceed to England by sea, the whole of the cavalry of the Army were to march through France, and reach England from Calais. This force was to be accompanied by an officer of the Quartermaster-General's Department to arrange for the supplies. He told me that from my recent promotion I was the junior officer of my rank, but that he intended to postpone the claims of other Assistants and assign to me this pleasant and honourable service. I was very grateful to him; and indeed when I look back I am deeply impressed with gratitude to God for the large amount of acceptance and favour which I experienced from all my superior officers and my military friends."

When his military duties were over and Dallas returned to England he was only twenty-three years of age—if age is reckoned by time; but the years of absence had been so eventful, so varied and under conditions which involved so much responsibility, that he had greatly changed during the five years since he left London for Cadiz. It must have been difficult to return to normal life, more particularly as his duty at the Treasury was to render direct account of all his services, both at Cadiz and to the end of the war. A tedious task which must have been rendered more difficult by the robbery which threw his papers into confusion. The Treasury allowed him to take an office for the settlement of these accounts, and granted a small salary for a clerk. It was necessary to choose a suitable person for this work. He writes:

"With these thoughts in my mind I was walking one day up St. James' Street, when an elderly man of rather dingy appearance, ran across the street, and embracing me warmly kissed both my cheeks again and again; exclaimed, 'Querido, Don Alexander—amigo de mi alma' (beloved Don Alexander, friend of my soul!), followed by diverse Spanish

exaggerations. This man had been for many years a merchant in Cadiz—an Irishman by birth, Don Miguel O’Kearney. He had failed in business and lost all his means, and had been engaged as a clerk in my office in the Isla de Leon, where he had arranged the very accounts that now had to be completed. I found on inquiry that he was in great distress, and I engaged him as my clerk upon the salary granted by the Treasury. This was a great relief to me, as Don Miguel was well acquainted with the routine of the matters which I should have had difficulty in explaining to a stranger.”

This occurrence, which would be described by some persons as a mere coincidence, was regarded by Dallas, in later life, as one of many instances of providential guidance. He wrote :

“ My experience of the guiding providence of God has been so great that I have learnt to interpret many things which at first sight seemed difficult to account for. . . . The remarkable combination of circumstances which have constantly occurred in my life, and seemed plainly to take the character of providential ordering, have often made me shrink from giving the details of these strange coincidences lest, being so far out of the ordinary course, they should seem to be exaggerated.”

The monotony of the work at the Treasury was broken for a short interval by the concentration of troops in London during the Bread Riots in 1815. Dallas was sent for to the Horse Guards to fulfil the duty of supplying the troops with food. It seemed as if his military adventures were now quite at an end.

In March 1815, however, Europe was startled by the news that the prisoner of Elba had escaped, and was at the head of a formidable Army. Commissary-General Dunmore, who was at the head of the Commissariat Department, promptly sent for Dallas, and the Treasury gave leave for him to go. On the 24th of March he sailed for Ostend. He had to arrange matters for the troops gathering in various cities in Belgium, and, when the divisions and brigades, etc., had been settled, he was appointed Assistant Commissary-General in charge of the 3rd Division. This Division was stationed at Soignies.

“ The quiet condition of the troops gave rise to the notion, that when the French came down upon us, the Duke was taken by surprise, which however, was very far from being the case. On the morning of the 16th of June the bugles sounded and the drums beat to arms. The division was put in motion. The troops had received an issue of three days’ provisions. . . . I proceeded to make my arrangements for the future. I had two commissioned commissariat officers under my orders. To one of them I gave specific instructions where to get necessary supplies and entrusted to him the wagons and other vehicles to receive them ; giving him orders to make use of all possible diligence, and to make

inquiries as to the course the army might take ; bringing up the supplies with all the speed of which the animals were capable, to join me with the division. To the other I gave equally specific instructions, placing under orders a number of baggage animals and desiring him to go to a particular dépôt, and there obtain, upon my warrant, barrels of spirits enough to load these animals."

Having arranged this matter satisfactorily Dallas proceeded to join his division, which he found bivouacked for the night. In the morning the General informed him that they were to retreat and take up a position covering the three great roads branching from the village of Mont St. Jean ; the General added that he thought extra spirits would be required. When Dallas told him the arrangements he had made he seemed satisfied, but begged him to hasten them. Dallas therefore rode back to make his arrangements secure and went on to Brussels ; here he found to his dismay that the man in charge of the spirits had not appeared. Meanwhile the Army took up the positions on which the battle of Waterloo was fought next day. His description of what he saw on the morning of the 18th of June must be given in his own words :

" It was a brilliant sight that morning of the 18th of June. The first division was posted at Hougomont on the right ; our own third division was formed next to them ; and so on all along, the troops in brilliant order formed the long line on the position. The enemy were opposite ; and on a high erection which happened accidentally to have been raised by the engineer officers engaged in the survey of Belgium, there stood a group of officers which could be discovered with tolerable plainness by the help of a good glass. On this elevation stood Napoleon and his staff, and from thence gave his orders during the battle. With so anxious a duty on my mind I hastened . . . to the Deputy Commissary-General, who was in charge of the right corps of the army, and, therefore, my superior officer. I told him of the non-arrival of the animals I had sent for spirits. . . . He told me it was more or less the case with all the divisions."

Dallas then was instructed to hasten to Brussels and to tell the Commissary-General that a supply of spirits must be sent at once. This he did, and found that great panic had seized the people, and the Commissary-General was at considerable loss for means of conveyance. The return ride to his Division was a sad and anxious one, the road was blocked with fugitives and wounded men on stretchers.

Among others he met the Deputy Commissary-General, who had come to meet him, to whom he had to communicate the fruitlessness of his errand. He asked what all this crowd of stragglers meant, and was told that there were strange rumours of disaster.

"We had paused and were sitting on our horses conversing, when we saw a regiment of Hanoverian Hussars, in threes, trotting along in the centre of the road towards Brussels. I rode up to the officer, and asked him what was the matter. All the reply I could get was : ' C'est mauvais, monsieur ! ' This regiment had been directed to charge some French artillery, and silence a few batteries that were annoying our squares. Some strange words of parley are said to have taken place between the commanding officer and the aide-de-camp who brought the message, who said impatiently : ' If you don't mean to obey the Commander-in-Chief's order, sir, you had better threes about.' The officer at once gave the command—' Threes about,' and the regiment moved off at a trot on the road to Brussels ! This regiment was soon afterwards disgraced in the general orders of the army, in language perhaps as severe as could possibly have been used."

Distress at the non-arrival of the officer in charge of the convoy with spirits was intensified by the encounters on this return to his division, and among others he met his kind friend, General Allen, who had been wounded in two places. He beckoned to him and said : " My brave fellows are famishing for thirst and support ; where are the spirits you promised to send them ? " Dallas writes :

" I could have wept as I answered, telling him of the miscarriage of my arrangements. ' Well, well,' he said, ' make haste to give them help. I know you will do what you can.' "

What Dallas feared was that the young officer had run away in panic, and this turned out to be what had happened. As he rode through Waterloo he found a storekeeper with a commissariat barrel of rum who said he had been waiting full five hours for a commissariat clerk who had left him there, so he commandeered this storekeeper's load and sent it to the front in charge of a serjeant. In order to reach his division Dallas had to gallop across a road under the arc of cannon shot. He writes :

" I saw one of the most splendid sights in the world's history. . . . It is impossible to give my conception of the feeling which rushes from the heart, on seeing a large body of men standing compactly shoulder to shoulder, and forming a living barrier which would seem to resist the outburst of the waves. And then to observe a line of heavy cavalry, first trotting, then cantering, and at last galloping against this living barrier ; and when you expect to see havoc and confusion in the ranks, to find the confusion confined to the assailants, the horses not venturing to force that formidable phalanx. And still more, when in open file a number of lancers at distance from each other come on to make a similar attempt, and the bristling bayonets turn away the horses, not one of which will venture to come within reach of the death on which they are

urged to rush. Our men stood like statues under these several shocks. The battle of Waterloo was gained by the patient bravery of the British soldiers, who kept their squares in spite of difficulties such as few can estimate."

Whilst Dallas was watching this charge the cart with the barrel of spirits came in sight, and the contents were quickly distributed among the men, who opened rank to admit the barrel, receiving it with a shout.

Soon after this the final charge took place, and Dallas had the happiness of saluting the great Duke as he rode past with his Staff on the evening of his great victory.

There is a passage in Dr. W. H. Fitchett's work, "How England saved Europe," which so aptly completes the picture of what Dallas saw that day that it may be quoted here.

"A picture of how Wellington bore himself during those long hours of battle is given by Picton's staff officer: 'His look and demeanour were always perfectly calm and composed, and he rarely spoke to any one unless to send a message or give an order: indeed, he generally rode quite alone—that is no one was at his side—appearing unconscious even of the presence of his troops, while his eye kept spanning intently those of his opponents. Occasionally he would stop and peer for a few seconds through a large field telescope, which he carried in his right hand . . . thus he would promenade in front of the troops along the crest of the position, watching the enemies' preparation for their attacks.' As he rode to and fro amongst his wasted and shot-tormented battalions, his presence everywhere seemed to stiffen their ranks. As his well-known cocked hat and hooked nose were recognized through the smoke, the word would run round the line of some much-enduring square: 'Silence! stand to your front. Here's the Duke!' Wellington himself was coolness incarnate, unhurried, undisturbed, his voice keeping its natural key, his eyes their cheerful and steadfast look. He drew up beside a square on which a French battery was firing with deadly effect. 'Hard pounding this, gentlemen,' he said; 'we will see who can pound the longest!' 'Stand firm, my lads,' was his address to another sorely buffeted square; 'what will they say of this in England?' . . . How constantly Wellington was under fire is told by the fact that of his staff no less than 12 were killed and 46 wounded." (Vol. iv. pp. 305, 306.)

On the evening of the 18th the rain fell steadily, and afforded some refreshment to the wounded on the field, but it grew dark, and it was weary work for Dallas. His horse had lost both shoes and it was difficult to find any farrier who had time to attend to him; it was also very difficult to find any place in which to sleep. At last, after prolonged search, he found a farmhouse; a young man and two women opened to him and he explained his situation and

asked for food and shelter for himself and his tired horse. He was hospitably received and a bed was prepared for him ; his horse also being cared for. He was able to take off his wet clothes and, wrapping himself in blankets, he was soon asleep after being supplied with a basin of hot coffee and bread and butter.

Half a century later, in 1864, he visited the field of Waterloo with a party of young people. After showing them the church, an old woman urged them to go and see the place where Lord Anglesea's leg was cut off. "My good woman," Dallas said, "I saw the Marquis of Anglesea after his leg was cut off. I was at the battle of Waterloo!" To which she replied: "So was I." Further conversation led to the discovery that this old woman, Madame Frambrough, was one of the young women who had received him so kindly on the evening of the battle. When he saw her house and recognized it, she clapped her hands with joy and exclaimed: "It's my house, it's my house! I took care of you that night." The party continued its journey, and on their return by the same route Madame Frambrough met them with six bouquets, a specially splendid one for Dallas. She grasped his hand and said she hoped to meet him again; and when he said that he did not expect to come to Waterloo any more; "No, no," she said, "I mean *la haut*, up on high." She held his hand as long as the pace of the horses would permit, then he gave her his blessing and they parted. He learned later that she died within a twelvemonth of this meeting.

The two days following the battle of Waterloo were days of great anxiety to Dallas owing to the non-arrival of the two officers with the stores. He managed to provide all the brigades of his Division with supplies for two days, but for the future he depended on the arrival of the stores. He sent in every direction to find their whereabouts. On the 20th, the General in command of the Division sent for him, and told him that the Duke of Wellington had written requiring that an account should be sent to him that very day with respect to the supplies during the battle, and that he was very angry at the reports which had reached him of the privations of the troops. Dallas writes:—

"My distress may be easily imagined when I had to tell the General of my disappointments and difficulties . . . especially as the troops were to march on the following day . . . the General felt for me and spoke kindly. He said he must send off a reply to the Commander-in-Chief dated that day; but that he would delay the orderly who was to take the letter till midnight, to afford me the most time possible. I left General Kielmansegge with a despairing feeling that I shall never forget, . . . in the most wretched state of mind I mounted my horse, and

determined not to return to the division until I had discovered the whereabouts of Mr. S." [the name is purposely omitted in the record]. "My mind was occupied with the imagining of all possible alternations as I rode to the rear, with the slow pace produced by uncertainty. The night had closed in and left a dim clouded moonlight. I had not proceeded more than a couple of miles when I observed in a field to the left of the road what appeared to be a park of artillery!"

On examining this field Dallas discovered that instead of artillery it contained all his transport wagons under the charge of a storekeeper. He inquired for the officer, Mr. S., and was told that he was sleeping in an adjoining farmhouse! He instantly ordered the horses to be harnessed and the wagons to be put in motion; then he repaired to the farmhouse, roused the inmates and was directed to the room where the officer slept. He kicked the door and drew his sword, and when, at length, Mr. S. was roused and opened, he writes: "I sincerely thank God that, in my anger, I did not cut him down. My language, however, was strong, and he afterwards reported it in all its strength to the authorities." Then Dallas left him to meditate on the language and galloped to the General to convey to him the joyful news that the stores had been found and that the regiment would obtain the full supply of rations before marching.

The following day, after a weary night, Dallas set out for headquarters, and on his way he met the other officer who ought to have brought up the other stores. He discovered that his surmise was correct; the officer had evidently fled in panic. It may be imagined with what feelings Dallas received him. When he reached headquarters he related to his superior officer in detail all that he had gone through from the conduct of these two subordinates, and he was told to sit down and write a report at once, which he did mentioning these two officers by name.

Dallas' Division was not the only one which had suffered from lack of supplies, but the reports from other divisions did not mention the names of delinquents. The Duke promptly inserted in General Orders a statement dismissing these two officers from His Majesty's service. The two officers hastened to England and made their remonstrance at the Treasury and at the Horse Guards. This remonstrance would probably have been availing under ordinary circumstances, as they were entitled to be tried by court martial before dismissal, but the whole nation regarded Wellington as the saviour of Europe, and no appeal against his decision had a chance of success at that moment. It was not until seven years later that the

Duke consented to allow their Commissions to be restored to these officers, that they might be placed upon half-pay. In later life Dallas regretted the extreme anger which he had shown, but if anger is ever justifiable (and who can doubt that it is) surely it was justifiable in this case, and the Duke's decision was not less just because others might have merited a like penalty if their names had been mentioned.

The record continues :

“ Our march to Paris was easy and interesting. The British Army took the right hand or western road and the Prussians pursued the parallel and somewhat longer road on the left or Eastern course, converging to Paris. It was very difficult to restrain the Prussian officers and soldiery from manifesting their strong revengeful feelings for all the injuries that Napoleon's troops had inflicted upon Prussia. I remember that riding across country one day, I came upon their course of march, and found a very beautiful château grievously damaged, as I was informed, by a party of Prussians who had occupied it one night. The large and splendid mirrors had all received shots and were split in various directions ; a fine grand piano was torn in pieces, and the remnants thrown about the salon ; the library had been well furnished with books, which were now all heaped in the middle of the floor, many of them with their contents torn from the binding. This was a remarkable contrast to the conduct of our troops on the line of march. Great watchfulness was exercised against plundering ; and what was taken from the inhabitants was paid for. It should, however, be remembered that the Prussians had the recollections of the ravages and insults committed by the French Army in Napoleon's campaign, and that every Prussian writhed under the remembrance.”

In a previous article the circumstances have been related which enabled Dallas to take possession of the mansion of General Villatte, one of the most comfortable and finest quarters at Passy. The garden of this house overlooked the Seine, near the Pont de Jena. As an act of revenge for the defeat of Jena, Blücher had determined to destroy this bridge ; and Dallas was able to observe the preliminary excavation made by a party of engineers in order to blow it up. A crowd of enraged French people were looking on ; the work was carried on with haste and would soon have been completed. Presently an English officer was seen parleying with the Prussians ; subsequently he rode off with speed. Then two officers appeared, an Englishman and a Prussian, who delivered a despatch to the engineers, which stopped the work. It afterwards transpired that the Duke of Wellington had expostulated in vain with Blücher, and had only prevented the destruction of the bridge by sending an aide-de-camp to meet the King of Prussia and obtain from him an order forbidding the act of destruction.

"Paris was in a very sad state at this time. There were a number of the officers of the army of the Loire, the remnant of the Waterloo fugitives, who hid themselves in Paris and took opportunities to insult our officers occasionally. Some duels took place and, upon the whole, it was not either safe or pleasant to attend the cafés which these officers frequented."

Dallas was very nearly involved in a duel, in defence of the honour of a lady, but when he reached the appointed place he found that the officer who would have been his antagonist had left Paris, and that the police had already paid a visit to his lodging in search of him. "Thus ended my duel adventure," writes Dallas, "the only one that ever occurred to me at a time when the extreme folly of deciding quarrels by a duel had not been exploded by the light of reason and the effect of more civilized manners."

After some weeks passed pleasantly in Paris, where the fulfilment of his duties was easy, and his quarters most comfortable, Dallas was suddenly recalled to London to deal again with the accounts; the Spanish clerk, left alone in charge during his enforced absence, had complicated matters by blunders. On the 30th of August he set out for England. After a considerable time spent in the uncongenial task of straightening the accounts for the Treasury, he was sent for to have a personal interview with three Commissioners in Somerset House. He wrote :

"This seemed a very serious affair, but in the strength of openness, and of a conscious sense of honesty, I went into their presence. I stated all my difficulties, in the course of which it was evident that a lively interest had been excited in them. I explained all the consequences of the robbery of my papers on entering France. I gave them a full account of my booty at the battle of Vittoria. This led them on to inquiries, which brought from me graphic accounts both of the battle of Vittoria and also details of the difficulties attending the duty of a Commissariat officer on a march. The interview lasted two hours and a half and closed so differently from the way in which it had begun, that we shook hands with smiles at parting."

Soon afterwards he received a document bearing the signatures of the three Commissioners with the seal of their Office; this document declared the accounts with the public accountant to be "even and quit." Thus ended his anxieties and also his share in the stirring events of the campaigns against Napoleon.

His subsequent life was by no means uneventful, but the events were not of a military character. A man of his quality could not fail to make his mark in any position, or to work indefatigably. His last illness was the result of his determination to carry out, when he was physically unfit, work he had undertaken. His mind remained

vigorous to the end, and when he died on the 12th of December, 1869, at the age of 79, he was missed by a large circle of friends and by a yet wider circle of those who had felt his influence through his writings and addresses. His energy and will-power were dominant characteristics, but his self-control, tenderness of heart and his innate and constant courtesy softened and balanced these forceful factors, so that he was greatly beloved. He possessed in a high degree the gift of charm and sympathy, and his personality left a lasting impression on those who came in contact with him.

THE WEST AFRICAN FRONTIER FORCE

BY MAJOR A. E. PERCIVAL, D.S.O., O.B.E., M.C., The Cheshire Regiment

I HAVE been asked so often during the last few months, "What is it like in West Africa?" that I feel perhaps a short description of the West African Frontier Force, and the conditions under which it serves, may not be out of place at the present time. It may also be of assistance to those officers who may be contemplating spending a few years of their service in that part of the British Empire. On casting my mind back to the time when I myself was first offered an appointment on the West Coast, I well remember how little I knew at the time of the conditions prevailing there. If, therefore, this article contains much which is already known to those officers who have already soldiered on the West Coast, I would ask them to realize that it is written primarily for those who have not had a similar experience.

In the first place, the term "West Coast" is in reality a "misnomer" and a relic of the time when the coast-line only had been fully explored and little was known of the interior. Many of the places where troops are stationed now are hundreds of miles from the coast—Lagos to Kano, for instance, being some five hundred miles as the crow flies.

As will be seen from a glance at the Army List, the West African Frontier Force consists of the Nigeria Regiment, the Gold Coast Regiment, the Sierra Leone Battalion and the Gambia Company. Each of these units comes directly under the Governor of their respective colonies, who is ex-officio Commander-in-Chief, and they are in all respects Government departments, having their own annual Votes which have to be passed by the Legislative Councils in the same way as the Army Vote has to be passed by Parliament at home.

The Inspector-General of the West African Frontier force, whose headquarters are at the Colonial Office, acts as Military Adviser as regards West Africa to the Secretary of State for the

Colonies and is the link between the Colonial Office and the War Office. He is also responsible for advising the Governors of the various colonies with regard to the military efficiency of the forces under their command, and for this purpose makes an annual tour of inspection.

The officers of the West African Frontier Force are, of course, entirely British, while there is a proportion of British non-commissioned officers with each unit. Each unit has also a full establishment of native non-commissioned officers, except for appointments requiring a knowledge of clerical work, e.g. quartermaster-sergeants, for which the normal soldier is not sufficiently educated.

Probably the majority of officers contemplating service in the West African Frontier Force ask themselves much the same questions. These questions may be summarized generally under the following headings :—

- (a) Conditions of service.
- (b) Climate and local conditions.
- (c) Effect on their military career.
- (d) Recreational facilities.

With regard to (a), the normal tour is now one of eighteen months, though in special circumstances an officer may be granted leave by the Governor after he has completed twelve months in the country. An officer is granted one week's leave, on full W.A.F.F. rates of pay, in the United Kingdom for each month he has served in the colony, so that an officer who has completed his full tour of eighteen months receives eighteen weeks leave, excluding the time required for the voyage to and from West Africa. Free passages are provided both ways. He is also entitled, provided he can be spared, to a short local leave of three weeks, during his tour of eighteen months, which can be spent either within or without the colony in which he is serving. This is usually sufficient to enable an officer to go on a short shooting trip if he so wishes.

An officer is permitted to serve for six years at a stretch with the West African Frontier Force, provided his services are not otherwise required by the War Office, and that he does not exceed ten years total colonial service. He is, however, at liberty to resign his appointment after one or two tours if he wishes to do so, though officers are recommended to do at least two tours, as they do not really commence to pull their weight until they have obtained a knowledge of the country and are able to talk to the men in their own language.

Pay and allowances are on a liberal scale, and the cost of living is moderate, though this naturally varies to some extent in the different colonies and in different stations. There is no doubt that an officer, if he wishes, can do himself well, have plenty of sport and amusement, and yet save a considerable sum of money out of his pay. A special outfit allowance is granted on first appointment, which goes a long way towards paying for the kit, equipment, etc., required, though, as a rule, it will not quite cover the total outlay. It is no longer necessary to take out large supplies of stores and food from England. Messes are found in most stations, and in addition everything in the way of food or drink can be procured in the country.

To turn now to the climate, sub-head (b), it must be frankly stated that West Africa is not, generally speaking, a health resort. On the other hand, it is by no means the land of disease and pestilence which many people imagine it to be. The term "West Africa" comprises a vast area, and the climate varies in accordance with the different localities in exactly the same way as the climate of the south coast of England is very different to that of Scotland. Thus, the climate of the coastal regions is normally humid, though frequently tempered by a pleasant sea breeze, while the climate of the northern territories of Nigeria and the Gold Coast is very much drier; in these territories a strong "Harmattan" wind blows intermittently during the dry season (November-March) rendering the days pleasantly cool, while at night the temperature frequently falls to the neighbourhood of 40 degrees Fahrenheit.

Individuals are, of course, affected by the climate in different ways, for whereas many officers enjoy just as good health as they would do at home, others become subject to occasional attacks of fever. Fever should, however, be rare if the ordinary precautions are observed and quinine taken regularly. During recent years there has undoubtedly been a great improvement in the general health of Europeans on the West Coast. This is no doubt due to improved conditions of living. Late hours are not conducive to good health on the West Coast any more than they are at home or anywhere else in the world. It is the object of those in authority in the West African Frontier Force that life in the messes should approximate as nearly as possible to that in the messes at home, and it has been found by experience that there is no reason why a normally healthy officer should not enjoy perfectly good health during his tour of service.

The policy as regards housing is that all officers should be

provided with permanent houses to live in, but progress is necessarily slow in this direction. At the present time, permanent houses have been provided at most of the headquarters stations, while officers at out-stations are accommodated in temporary mud buildings, for which special "bush" allowance is drawn. These houses, if properly built, are by no means uncomfortable, and are often cooler than the permanent buildings, though they are difficult to keep really clean.

As regards the surrounding conditions, this again varies considerably in accordance with each locality. An officer may find himself stationed in a large town like Lagos, Accra or Freetown, or in an isolated bush station, or in the more open country of the northern territories of Nigeria or the Gold Coast. Some officers may prefer one and some may prefer another, and, as far as possible, officers' tastes are considered when postings are made, though it is, of course, not always possible to fall in with individual wishes.

West Africa has progressed enormously in recent years, and those whose ideas of it are drawn from the scenes depicted in the play "White Cargo" would be surprised on gaining a more intimate acquaintance with the country. At all the big coast towns and in many of the big centres up-country a high degree of civilization has been reached. Good buildings exist, motor-cars are rapidly increasing, and, in some of the larger towns, electric light and ice are in common use.

West Africa is, however, still a land of acute contrasts. At a Government House one may meet a highly cultured African lady, speaking perfect English and dressed in the latest Parisian creation. A few days later one may be in the bush where the local ladies follow the fashion set by Eve, though in their case the fig-leaf is usually replaced by a bunch of leaves.

The next question the prospective candidate asks himself is, "How will it affect my career?" or "Shall I forget all I ever knew?" I think that the answer to this is that the British Army has to be prepared to fight in other parts of the world than France and Belgium, and that there are many things to be learnt in West Africa which cannot be learnt on the training areas of England. Training in West Africa is carried out on modern lines, and the objects in view are two-fold—first, to render the force fit to fight wherever it may be called upon to do so, and, secondly, to keep officers in touch with modern developments at home, so that they may not lose ground as regards promotion and Staff College examinations, etc. With this end in view, papers are set periodically by the head-

quarters staffs, and officers are encouraged to attend courses of instruction during their leave of absence in the United Kingdom. Officers are permitted to present themselves as candidates for promotion and Staff College examinations while actually serving in West Africa, and a number avail themselves of this opportunity.

Camps of exercise are held annually, during which as many troops as possible are brought together for collective training, and, wherever possible, at least one staff ride is held each year for the training of senior officers.

West Africa, perhaps, offers more variety of transport than any other in the world—rail, M.T., camels, donkeys, carriers, steamers and canoes can all be made use of at different periods of the year—and this alone provides valuable experience.

The African, if properly handled, makes an excellent soldier. Officers are almost invariably attracted by their keenness and cheeriness, but full value cannot be obtained from them unless an officer can talk to them in their own language. A knowledge of the Hausa language is therefore insisted on in Nigeria and the Gold Coast, and no officer in these colonies is promoted to the rank of captain until he has passed a test in this language. In Sierra Leone and the Gambia men are obtained from so many different tribes that no lingua franca such as Hausa can be used. This is somewhat of a disadvantage, but every effort is made to overcome it by teaching the men English.

The degree of proficiency attained by the African soldier in such weapons as the Lewis gun, machine gun and 3·7-inch howitzer is really remarkable when it is remembered that he cannot read or write, and so is debarred from taking notes when under instruction and from refreshing his memory by the study of text-books and manuals.

The majority of the officers serving with the West African Frontier Force undoubtedly have greater responsibility and therefore obtain wider experience than when serving with their units at home. A junior major or senior captain, for instance, may frequently find himself in command of a battalion, while companies are as often as not commanded by subalterns, some of whom may hold the local rank of captain. Again, artillery officers frequently find themselves in command of companies, for a proportion of artillery officers is authorized in each infantry battalion. These artillery officers thus have a unique opportunity of really learning infantry work, an experience which cannot fail to be of value to them when they rejoin their batteries at home. Cavalry and Tank Corps

officers also are taken in the infantry battalions and can derive much benefit from the experience.

As a rule the most popular appointment with officers serving with the West African Frontier Force is to be placed in command of a company or detachment at an out-station. Such out-stations are frequently situated some hundreds of miles from the nearest troops, and officers in command have their own show to run, and, if they are lucky, may occasionally be ordered to organize a patrol to deal with recalcitrant natives in the neighbourhood.

Many regimental officers have told me that they consider one of the main benefits which they derive is the knowledge they gain of detail, without which no officer can be really efficient. This is easily understood, as native civilian clerks only exist in headquarter offices, and company clerks are unknown. Owing to the demands of leave, etc., there is often only one British non-commissioned officer in a company. Much of the detailed administrative work, therefore, falls on the shoulders of the officers. An officer at an out-station is also responsible for the upkeep of the European and native houses on charge of his detachment.

An officer who is keen on his profession has more opportunities of training and commanding men than in the United Kingdom. The difficulties that exist in this respect at home are well known—the dispatch of drafts to the foreign battalions, numberless men employed in various capacities and parades more often than not consisting of “two men and a boy.” In the West African Frontier Force the situation is far more favourable, and an officer has a real command—on parade as well as on paper. Companies and platoons are practically always up to strength, and those men who are employed are in nearly every case allowed for and surplus to the establishment of sections and platoons.

It will be seen from the above that, to obtain full value from the experience which the West African Frontier Force offers, an officer must be keen and not afraid of work. The efficiency of the force depends on the leadership of the Europeans. The native is easy to lead, but quick to detect failings. There is no place, therefore, for those who would lead a life of ease and leisure.

Finally we come to sub-head (d), “What are the recreational facilities?” “Shall I be able to get my polo, or tennis, or cricket, or shall I be able to get some shooting?” is a question which is asked by the majority of applicants—and rightly so, for recreation as a rule goes hand-in-hand with health. Regular recreation in the evening is most strongly advocated in West Africa, and an officer

who does not care for games and has no inclination to shoot may find himself at a loose end when the day's work is done, and time may fall heavy on his hands.

The principal games played in West Africa are polo, tennis, cricket and golf. Polo, of course, can only be played at those places where ponies can be kept, which may be summarized briefly as the northern territories of Nigeria and the Gold Coast and certain localities which have been cleared of tsetse, such as Lagos and Ibadan in Nigeria, and Accra in the Gold Coast. Where polo can be played, it is undoubtedly, so far as soldiers are concerned, the principal game, and great enthusiasm prevails. In the West African colonies polo does not as yet demand a long purse, and, if he is not too ambitious, any newly-arrived subaltern can afford to play the game. Although ponies are not always easy to obtain, a good average polo pony can usually be picked up in the northern territories of Nigeria and the Gold Coast before very long for about £15, while, if the officer cares to get a raw pony and train it himself, he can probably obtain one for £10 or less. Ponies in Southern Nigeria or in Accra naturally cost rather more, as the cost of transport from the northern territories has to be added on to the original purchase price. Three tournaments open to all clubs, two open and one handicap, are played off annually in Nigeria, and in these teams from most of the clubs compete. In the Gold Coast periodical matches are played between Accra and Tamale, the latter being situated in the Northern Provinces. In addition to these tournaments and matches, practically every large station in the horse country has one or more race meetings in the course of the year, at which there are special races for polo ponies, so that every officer, if he cares to, has an opportunity of entering his own ponies.

As regards tennis, practically every station on the West Coast has one or more tennis courts, and a game can be obtained almost every evening. The courts are usually made of some hard substance, owing to the difficulty of obtaining sufficient water for grass courts, though at some of the coastal towns, especially Lagos, excellent grass courts are to be found. Tennis, like polo, can be played all the year round, except when the courts are temporarily deluged by storms in the rainy season.

Cricket is played at a great many of the larger stations and hockey at some. The chief difficulty, except at the large centres such as Lagos, Accra, etc., is to vary the matches, as stations are usually too far apart for frequent visits to take place. A cricket match between Nigeria and the Gold Coast takes place annually at Christmas time.

There are golf courses at most of the larger stations. These are, with few exceptions, not to be compared to the courses at home. The lack of proper turf, the hardness of the ground in dry weather, and the rapid growth of the grass during the rains all militate against good courses, but the facilities for a game are there, and much enjoyment and healthy recreation are obtainable. One seldom travels anywhere without a bag of golf clubs.

Although West Africa cannot be compared with East Africa where shooting is concerned, yet there is in most parts quite good shooting to be had by those who are keen on it. Haartebeeste, roan and various smaller types of antelope are common in all the colonies, while elephant, bush cow and lion may occasionally be encountered. It must not be assumed, however, that an officer can always get a week-end shoot from his station, though this can actually be done from some stations. Usually a certain amount of time is required to get to the hunting-ground, but this can generally be obtained in the shape of local leave at least once in each tour, while, if an officer is lucky, he may get an odd day or two when away from his station for training purposes, promotion exams., etc. I myself once had the good fortune to come across a herd of roan antelope when setting a promotion examination paper, and succeeded in getting a good head.

Bird shooting can be obtained in the neighbourhood of most stations, the most common birds being guinea-fowl and bush-fowl (a species of partridge). There is good duck shooting to be had at certain places, while snipe and bustard (both greater and lesser) can occasionally be "bagged."

Service in West Africa opens up opportunities for travel and exploration. Officers are encouraged to spend part of their leave in exploring Africa, provided that they allow themselves sufficient time at home to recuperate before their next tour. One officer, Lieut. D. R. G. Cameron, of the Royal Scots, recently crossed the Sahara by a route which had seldom been traversed previously by Europeans.

West African troops saw a considerable amount of active service during the Great War. After dealing successfully with the enemy forces in the German territories bordering on our West African colonies, contingents were formed for service overseas and dispatched to East Africa where they took part in the arduous campaign against the German forces under Von Lettow. Heavy casualties were suffered, but the African troops displayed great gallantry and bore the hardships of the campaign in a cheerful spirit.

Finally, in West Africa, one sees a constant struggle between the efforts of man and the forces of nature—a struggle to open up and to develop country which is of great value to the British Empire. One sees railways and roads being built, machinery being installed where a short time ago everything was done by manual labour, and land, which recently was virgin bush, being turned into productive areas. Such experience cannot do otherwise than broaden one's vision and give one a wider outlook on life.

In conclusion, let me utter a word of warning. West Africa is not a bed of roses. There are hardships to be faced and discomforts to be endured. But there is a man's job to be done there, and the experience which it offers cannot fail to be of value to officers of the right type.

YEOMANRY ARTILLERY

BY CAPTAIN C. T. BECKETT, M.C., Royal Artillery

IN 1920 there appeared upon the doorstep of the Royal Regiment of Artillery a superior and well-dressed foundling child. It was well found and vocal, but somewhat reluctant to play with the other little boys in our yard, for it took its fate hardly.

Such was the arrival in our midst of the Yeomanry regiments which were converted into Territorial Artillery. The change of weapon—the gun for the sword—involved a complete revolution in the organization and tradition of the Yeomanry. Many of the regiments of this cavalry force were raised during the eighteenth century for various purposes, more particularly for service in Ireland, to repel the Stuart invasions, and to combat threatened landings by the French.

Some of these regiments were disbanded about 1830 in the general reduction of our military forces which then took place, but new regiments, such as the Essex, Bedfordshire and Norfolk Yeomanries, were formed or re-raised from time to time since that date, more particularly after the creation of the Territorial Force in 1907. For over a hundred and twenty years the Yeomanry maintained an individuality of its own, and each regiment was the *corps d'élite* of its county. It had acquired before the war of 1914 a status distinct from any other auxiliary force.

In mid-Victorian days it cannot be maintained with any regard for accuracy that the Yeomanry was a particularly efficient force, but after the South African War there was a considerable improvement in its military value, and after it became part of the Territorial Force in 1907 a higher standard of training was demanded, although this standard of efficiency was by no means on a par with the standard demanded and achieved to-day. How far this standard will be maintained remains to be seen.

The passing of the Territorial Force Act led to the creation of the Territorial Artillery—not in its entirety it is true, because many

excellent corps were in existence before that date—but, generally speaking, Territorial Artillery as a portion of the Royal Regiment dates from Lord Haldane's military reforms.

There was at first considerable difficulty in getting the right stamp of officer and man for this force because *esprit de corps* and local tradition were lacking, and there can be little doubt that prejudice dating back to the formation of the Territorial Artillery has had some share in the reluctance of the Yeomanry to become associated with the new arm. But, as a matter of fact, a change of arm is nothing new for the Yeomanry. Many of these cavalry regiments began as mounted rifles, or fencibles, or guides, and one certainly was a mixed corps of cavalry and fusiliers. During the war, too, the majority of the regiments, which were re-armed in 1920 as artillery, were dismounted, and served as infantry battalions.

But there is no doubt that the organization of the Territorial Army does not lend itself to the all-embracing uniformity of *esprit de corps*, dress and tradition which are embodied in the Royal Regiment of Artillery.

To those who know something of the isolation of one sub-section of a battery from another and the difficulties which exist even in the Regular brigades of artillery in the creation of a brigade spirit, it must sometimes appear that even in the Regular Army these comprehensive ideals may conceivably be beyond achievement. Many war-time gunners never got beyond the letter of their battery to the number of their brigade, and this though divisional "*esprit*" was most marked.

In the Territorial Army the village is often the largest unit that looms in the unmilitary mind of the soldier, and his *esprit de corps* will certainly stop short at his county, if not at his own particular battery or battalion.

It is always dangerous to generalize upon the Territorial Army, so diverse are its components, so isolated its units and so widely different the conditions under which the units are organized and live, but it is safe to generalize to the extent of saying that few regulations as issued are applicable with comfort to every unit which they are designed to administer.

This being the case with the Territorial Army as a whole it may easily be imagined that the inculcation of artillery methods to these reluctant converts from cavalry to guns will not be carried out without the exercise of considerable imagination, tact and deference to long-established tradition.

The principal aspects in which Yeomanry Artillery is likely to

differ from other artillery units of the Territorial Artillery may therefore be briefly set forth as : (1) tradition ; (2) uniform, organization and recruitment ; and (3) training and camp.

We have already dealt shortly with the aspect of tradition. Continuity must be the keynote of policy.

With regard to uniform, organization and recruitment, when the reorganization took place the Army Council most emphatically promised that, with minor modifications to indicate the change of arm, the uniform of the Yeomanry should remain undisturbed. This decision, admirable and beyond criticism, has complicated many aspects of conversion. First, certain of the new artillery brigades have been formed from more than one Yeomanry regiment. Brigades are workable either as a homogeneous whole, in which battery independence is subordinated, or as four independent batteries subject only to benevolent supervision. A brigade of artillery consisting of four very independent batteries is difficult to handle. When these four coalesce into two opposing camps the difficulties are insupportable and a source of friction arises whence opposition may develop into disorder.

This is even more particularly so when regiments have been combined which, although territorially adjacent, are poles apart for reasons deep-seated in history and based upon family feuds, local feeling, old difficulties of communication, different methods of farming and sources of recruitment. In some such cases the only manner in which cohesion appears attainable is by producing a composite title, badge, button and uniform based upon those of the regiments concerned, by welding all traditions and customs into a solid whole applicable to both units and by jettisoning all that are sources of internal friction.

This distinction of uniform within the Regiment of Artillery has its counterpart in similar cases in infantry regiments, where rifle and kilted battalions exist as 4th, 5th and 6th battalions of regiments whose Regular battalions are dressed and drilled as are the majority of the infantry of the Line. These battalions are perfectly loyal components of their regiment. They are just as efficient infantry men. There is no reason why Yeomanry brigades should not in time become, despite their dress distinctions, just as efficient gunners as their neighbours whose uniform is more orthodox. A yeoman will remain a yeoman be he of the cavalry, the artillery or the infantry.

Where, however, sources of recruitment differ, the problem is more complicated. A brigade formed from the Yeomanry of two

adjacent agricultural counties can deal with the problem of annual training by compromise within easy limits of elasticity. A brigade formed from a suburban Yeomanry and an agricultural Yeomanry has no such easy task. The periods that suit the one for camp are by no means those which suit the other, and being poles apart in employment, character and amusements, compromise is impossible.

Such grouping can only be justified by overwhelming considerations of administrative convenience and location of the necessary accommodation. Means of communication must play a large part, and it is doubtless for this reason that the Surrey and Sussex Yeomanries have been grouped together. Lines of communication are so organized that they traverse with facility both these counties, but a more natural grouping (if grouping is essential for reasons of economy, and such a grouping would further this desirable object) would have been to group the Surrey and Essex Yeomanry and the Hampshire and Sussex Yeomanry for brigade purposes. Though the lateral roads and railways in the south-east of England are less perfectly organized than in the south-west, owing to the radial attraction of London, the motor-car can deal satisfactorily with the problem, if necessary. There are, however, doubtless many excellent reasons why such a grouping was not pursued.

The old Yeomanry regiments were raised as troops, and the present organization and accommodation of the Yeomanry brigades is based on this origin. Such a system was eminently suited to cavalry training of an elementary nature, but it is not so suited to gunnery training of an elementary nature.

Sub-sections have replaced these troops in many cases, while in some cases sections have been formed.

A sub-section at peace strength consists of some twenty men, and in those rare localities where the unit is up to strength it would be optimistic to hope for a steady average attendance of more than seven men per sub-section throughout the individual training season. The distances which the men have often to travel are great and the means of locomotion usually inconvenient.

Of these men some will be drivers, some farriers, saddlers, or non-commissioned officers of higher rank than bombardier, and standing gun drill with a full detachment will be a rare proceeding. Sub-section driving drill is of little use. In such circumstances progress will not be rapid. On the other hand, such wide dispersal of recruiting stations will tend to stabilize the general recruiting situation within the unit and, if we take it that the Territorial Army is primarily a framework for war expansion and training, recruiting

is of paramount importance. Concentrated units undoubtedly feel recruiting depressions more greatly and react more violently to local causes of unpopularity. By dispersal, touch is maintained with a portion of the population which, if the drill stations were abandoned, would relapse into apathy and would be backward in wartime in their efforts to enlist.

Granted that it is not intended that the Territorial Army should go abroad for at least three months after the declaration of war, it would seem that the broader its appeal the better, and that a lower standard of training may well be accepted if the right material in officers and men is attracted. No man can hope to turn out highly efficient soldiers at the end of twenty drills, be his unit dispersed or collected, and there can be little doubt that the restricted appeal of a concentrated unit must produce less admirable material than the wide field of a highly decentralized unit whose labours on embodiment should accordingly be lessened.

We may now deal with the important matter of the selection of officers and men. The largely increased taxation necessitated by the Great War has brought about a fundamental change in the ownership and occupancy of land. Old standards of living have had to be altered considerably by those whose income is derived from land. Property has changed hands, and many farmers who before the war served in the Yeomanry as troopers, by purchasing and extending their farms, have raised their social status and are now unwilling to serve in the ranks. Some of them, too, who were given Commissions in the war, others who were war-weary, and others who had stayed at home as food producers, were reluctant to enlist after the war was over, while, in addition to these personal reasons, the great increase in the cost of labour has left the farmer class less leisure for any form of military service.

Many units also have undoubtedly added to their difficulties in attracting the pre-war class of man by enlisting labourers so as to make a start in the re-formation of the unit. This policy, particularly in neighbourhoods where the ownership or occupation of small farms makes the difference in status between farmer and labourer less apparent, has certainly enhanced the difficulty, for where contiguity exists social differences are apt to be stressed, and sources of friction assume a larger and more personal aspect.

Master and man on account of their intimacy in their labours would find it impossible to take their recreation together where their respective positions might well be reversed and the man become the non-commissioned officer. As regards the officers, the sons of

landowners who before the war would have remained at home, or have been employed in none too arduous labours, are nowadays fully employed either abroad or in big business centres. Thus whereas most Territorial infantry officers carry on their business near their homes and consequently can give considerable personal attention to their units, the class from which Yeomanry officers usually come can, as a rule, only give attention to their units during their all too short holidays. It is obvious, therefore, that if officers of the old type are to be obtained (and their general standard of education and leadership makes them very desirable) they must be recruited young and before other claims upon their holiday time have developed. The glamour of an unusual uniform and of an invitation to join a *corps d'élite* still appeals to the young man at the University, where it might fail with an older man, out in the world and with formed habits.

If the young man of University age is to be encouraged to join, sympathetic treatment of appeals for consideration of refund of outfit grant, attendance at camp being excused for examinations, and other kindred difficulties must be met in a broad spirit of conciliation. Matters have improved considerably of late in this respect.

The training of a Yeomanry brigade, as of any other Territorial unit, is influenced by its organization, accommodation and distribution, and to an abnormal degree by the peculiarities of the class from which it is drawn. The agricultural population of the more remote counties of England is not the best recruiting ground for a regiment from whose members the exercise of their profession demands quickness of uptake, a higher standard of education than is required for less technical arms, and clarity of thought. Yet these drawbacks are purely relative and, given good officers and an adequate time factor coupled with close individual attention, there is no reason why men from the agricultural districts should not make as good gunners as any other class of the community. Their slowness of thought makes them more amenable to discipline and less prone to argument and retort than the quicker witted townsmen, and they are steady beyond all praise when in action. The point which must be borne in mind by the military authorities is that although progress may be slower, it will be more sure, and that only the inconvenience of war should hasten the foundations of training. A wholly fresh standard of efficiency and tradition has to be created. The very fact of dispersal in some Yeomanry brigades is of assistance in the grounding process.

The permanent staff instructor is able to give more individual

attention to layers, fuze setters and to detachments generally, where he has a multitude of small parades, and, provided that he is kept up to his work, the individual training of the gunner should be better and more lasting. Often, however, the accommodation offered is so cramped and the lighting so bad, that laying is more a drill than an accurate evolution. It is unfortunate that beyond such individual training where means of communication are difficult, even the lowest forms of collective training present difficulties which the need for economy renders well nigh insuperable.

Week-end camps are the sole means of collecting together sufficient men to provide training for officers and non-commissioned officers, and these are limited, first, by the difficulties of transport (in many parts of England there are no Sunday trains); secondly, by the absence of a margin of labour on small farms; and thirdly, by the distaste of the man, who for five days in the week has been called upon to groom and feed two or more horses, for grooming and feeding for two more days during his week-end's relaxation, horses in which he may have no particular interest. Where a Regular brigade is visited for these camps, the opportunities are limited by barrack accommodation, low peace establishments and the claims of week-end passes leaving no margin to give the necessary assistance. It might be added that on the turn out provided by these Regular brigades they themselves are judged and the future smartness and discipline of the Yeomanry Artillery will much depend, not to mention the reputation of the Regiment, with the best informed and most influential of the civilian population. Once these difficulties are overcome, and officers and men have been induced to attend, week-end camps are worth individually more than all the drills of a trained Yeoman put together. The first difficulty can be overcome, financial objections apart, by the use of char-a-bancs, and once the second is overcome two full days are often available. Townsman rarely can leave work before mid-day on Saturday, and where there is a sprinkling of men following trades connected with agriculture, such as seedsmen, farriers, farmer-butchers, auctioneers' clerks, etc., time is apt to be curtailed to the extent of their Saturday morning office hours.

The training grant rarely permits of more than three such week-end camps per battery.

Where a Regular brigade is available the third objection can be overcome and, with a programme of training and requirements in horses and equipment rendered in advance, the horses will be watered and fed and turned out by the Regular soldiers, and the time

otherwise wasted in watching farmers and their men grooming horses can be spent more profitably in other instruction. This in itself is an aspect to compare with that of the townsman enjoying Sunday with unaccustomed animals to groom and pander to, that merits attention.

Even such week-end camps cannot be regarded as section training nor can they be set aside as opportunities for training specialists. Whatever efforts are made to the contrary, individual attendances will remain haphazard. They are better occupied in seizing the advantages of driving drill with several teams of trained horses, for which dispersed batteries have no other opportunity, in training recruits to drive and in training officers and non-commissioned officers to take command. Finally, they are admirable opportunities to train the battery staff.

The training of a battery staff, its recruitment and organization, is in a dispersed brigade an impossible task unless the whole staff is recruited at one drill station. No matter that an admirable signaller lives at X, or a perfect B. C.'s assistant lives at Y, the basis of battery staff training must be the signallers' class, and, where a brigade is widely dispersed, this can only be overcome satisfactorily if one drill station in each battery is charged with the duty of raising and training the whole battery staff. Special circumstances will no doubt occasionally permit of individuals being drafted into the staff after arrival at camp, but the principle is one which must be followed if progressive training is to be attained. A similar principle should be applied to the Lewis gunners and to the sub-section and section organization. A drill station must produce multiples of sub-sections.

In such dispersed brigades the adjutant must rest content with wide delegation of responsibility to his permanent staff, which will often need reinforcement for specialist training by part-time instructors.

The adjutant himself must generally supervise the manner and system of instruction, actually superintend week-end camps, coach officers for certificate A, and promotion if he can persuade them to attend, and conduct intensive propaganda in favour of courses and attachments. He will need to attain a close liaison with his affiliated Regular brigade, informing it as to the particular requirements of each officer or man sent to it for attachment. He should also watch with care the dates of Command courses, collecting, if possible, sufficient officers for a date convenient to a number of them. This will enable him to apply for specific dates for such courses and for

a specific locality for them before the dates are allotted without regard to the possible attendance of any officers.

It must be remembered that no syllabus of progressive instruction can be adhered to. The instructor is unaware, until a quarter of an hour after the advertised hour of parade, as to who will turn up, what will be the numbers, and what will be the capacity and standard of attainment of the individuals present. The maintenance of a number of registers may assist the instructor in catering for the majority of those present, but it will never enable him at a subsection drill station to cater for men of diverse measures of attainment simultaneously.

Instruction, consequently, will tend to remain elementary until the annual training, when such organization of classes becomes possible.

One year re-enlistments are the curse of the recruiting situation as they affect training, and should be limited in their application to a percentage of those eligible annually. Others should re-engage for four years or not at all. A unit with a high percentage of one year extensions is at the mercy of the vagaries of local prejudice and feeling and may find itself bereft of men at any moment.

The year 1924-1925 saw the end of the initial engagement of a number of old hands whose re-engagement for one year at a time has made the organization of a battery from a training point of view most difficult. These men seldom decide definitely to re-engage until the last possible minute and much valuable time is wasted in persuading them to do so. This kind of thing makes such men consider themselves indispensable, which defies training. Whatever their local standing and influence, such men should be eliminated steadily as the years go by until a flow of four-year men of some twenty per annum has been established in each battery. Only then can definite plans for training a man for a particular job and in relief of a particular man be made.

Promotion examinations are a nightmare to all concerned with the recruitment of officers. The stress of business life to-day leaves little leisure for the concentrated study required for such matters, and it would seem that in the not far distant future many units will have to depend for senior officers upon the flow of retired officers of the Regular Army willing to undertake such employment. The recent abolition of the written examination should ameliorate the position greatly. But how far this change will affect the recruitment of young officers who will see little hope of promotion ahead will remain to be seen. Most Yeomanry officers are sufficiently

lighthearted not to worry unduly about their military rank, but, nevertheless, there will always be some who will be keen about promotion. These will find themselves unable to go in for their qualifying examination owing to other calls on their time and will be bad recruiters for their younger brethren.

On the other hand, if in war these officers claim to exercise command *pari passu* with their Regular brethren, they must attain a standard of comparative equality and efficiency. The only alternative would seem to be a wholesale grant of acting ranks with supersession from the regular list when necessary on the outbreak of war.

A further trouble is in getting officers of the desired class resident sufficiently near to a drill station, so as to permit them to be trained and to assist in training. The motor-car has done much to solve this trouble and week-end camps provide an excellent training for such officers as are unable to visit their drill stations frequently. They also provide a number of men for the officer to command who are usually absent from the ordinary drill night of a dispersed brigade. A sympathetic Association, willing to relax hard-and-fast rules for special circumstances, can do much to facilitate such matters. Guns can be taken to the men where communications are bad, and where a number of men live close together but several miles from a drill hall; rides can be arranged, travelling by char-a-banc to places where horses can be hired from Regular troops cheaply and efficiently and in many other ways can assistance be given. The present system of voluntary courses should present little difficulty if tackled immediately the officer joins, and provided that the dates of University vacations are considered when arranging the dates of these courses.

A special difficulty lies in the training and recruitment of the higher non-commissioned ranks more particularly of battery quarter-master sergeants.

One Yeomanry brigade has set an example, followed since by many others, of recruiting only ex-Regular battery quartermaster-sergeants for this employment and paying them the total sum allowed by the Association for caretaking and cleaning and such perquisites as may exist, together with £50 a year grant from the War Office. An attractive employment is thus provided for a highly qualified man, and it is unquestionable that, where it has been adopted, a high standard of efficiency in the office and of cleanliness and brightness in turn-out has been attained.

These men travel on motor bicycles at their own expense round

the drill stations of their batteries, and a problem which could find no solution other than that provided by a number of part-time, and, consequently, inefficient employees has been solved.

Such briefly are the problems of recruitment and training. Those who try to achieve a higher standard than that for which the Territorial Army is intended will discourage those who admittedly are but part-time soldiers awaiting full-time employment to make themselves efficient. Yeomanry Artillery will commence this full-time employment with the advantages of good horsemanship, good leadership and a class of officer whose educational and general abilities will shorten the task of "breaking in" by several months. Yeomanry brigades are more often widely dispersed than the contrary, but it is realized that, where they are concentrated and where special circumstances exist, many of these observations will not apply.

The Yeomanry Artillery, generally speaking, is organized as Army brigades and thus maintains to a certain extent its former independence. This situation has had the drawback of placing the Yeomanry in the fore-front of the mechanization programme as it affects the Territorial Army.

Mechanization is inevitable and for war, and from every point of view which concerns the efficiency of the Service and the comfort of the man, preferable. So long, however, as annual training is regarded as a recreation and a holiday so long will the majority of Yeomanry Artillery brigades demand the horse for their traction. Brigades have now stabilized their recruiting bases which are mainly agricultural.

While the broad fields of East Anglia may have reared a mechanical agriculturalist used to tractors and motor cars, the small enclosures and the moorland stock farms of the West of England have precluded the general introduction of mechanical traction.

Such conditions, widely differing from every aspect, can find many parallels elsewhere in England. There is a further issue also which militates against mechanization. The old appeal to the Yeoman always included the proviso that he should find his own horse. In a horse-drawn Yeomanry battery organized on these lines every man looks to "make a bit" on the provision of his horse whether he hires it or whether he actually produces his own animals. The system is infinitely preferable to hiring horses wholesale from a contractor despite the extra trouble involved. A better horse is obtained, the man has a direct interest in its welfare, and the contractor's profit goes to the man most concerned. There is, therefore,

a vested interest, the subversion of which will endanger the recruiting position and cause considerable disappointment, if not discontent. It is true that mechanization will simplify enormously the animal problem from the point of view of the battery commander's labours, and it is probable that in cases where horses are hired wholesale from contractors that the change might be accomplished without affecting very much the moral of the *personnel*.

If mechanization is to be applied universally to Yeomanry brigades, the basis of recruitment will, in many cases, be entirely changed, and the recruiting appeal will be mainly to urban classes. If the drivers are recruited from the garages, there is little point in recruiting the gunners from the fields. Sub-sections cannot further be split up.

Is this tendency to limit the Territorial Army to urban areas advisable when the outbreak of war will set free a flood of young men of a mechanical turn of mind anxious to find suitable employment at a moment when the rise in price of agricultural produce will tend to limit the response of the agricultural population now satisfactorily recruited?

So long as the horse exists, the man who rides will consider himself a finer fellow than the man who does not, and he will feel the more keenly his transfer to the bucket seat of a Fordson tractor, or the body of a six wheeler.

The problem cannot be solved on the narrow basis of training for war. The material to train must be attracted before training can commence. Training, however efficient, will be of little use if men are turned away from the unit by the distasteful nature of the training system. Let all unpleasant shocks be kept in hand until the imminence of war makes their application essential and renders consideration of personal feelings of little moment in the hour of national emergency. Yeomanry Artillery is not ready to withstand the shock of another basic change in its organization. "Horse or tractor" is in time of peace a local problem and should be left to local solution.

In the matter of dates for annual training these units ask for the same consideration to be shown them as do other units which specialize in recruiting from urban classes of employment.

August is not, as is sometimes alleged, the best time for annual training, and its suitabilities are generally confined to urban units. Just as the most suitable period for annual training for London troops is arranged to coincide with their holiday season and the slack business time generally, so must Yeomanry Artillery, recruited from

the agricultural trades and callings, be permitted to train when labour can best be spared from the needs of local agriculture. This attribute is by no means confined to Yeomanry Artillery, but is common to many other county Territorial brigades.

Weather, season and climate, and the nature of farming practised, all are matters for consideration. What may suit Devon will not suit Hampshire; what is convenient for Norfolk may not satisfy Westmorland.

Generalization and standardization, as we have already seen, are difficult of application to the Territorial Army as a whole, and to Yeomanry Artillery in particular. It remains true, nevertheless, that to order a Yeomanry brigade to practise during the corn harvest or during the autumn tilling is to invite disappointment and disillusion.

It is not sufficiently realized that their Territorial responsibilities do not come even second in the estimation of the majority of officers and men. They have hobbies for the gratification of which they may have incurred considerable expense. They consider very closely the calls which the Territorial Army may make on their time, lest their enjoyment of these hobbies is curtailed.

To ask an officer who takes annually a shoot in Scotland, and who has joined for that reason a unit that goes to camp in May, to do his practice training in August is to ensure his non-attendance. To ask a farmer to notify his willingness to proceed to camp in July before he knows when his hay will be gathered in is to ensure an application for discharge. A change of date of annual training may, owing to the agricultural demands of some specific locality, deprive a battery of the whole of its staff, or of its non-commissioned officers or of other specialists.

Yet such things occur because the regular officer, familiar with urban units officered and manned by men to whom their annual training is their annual holiday and principal hobby, has sometimes not fully grasped that such generalizations are dangerous, and are totally inapplicable to these brigades, differently officered and manned, differently organized, with their own traditions of peace and war.

Above all, let it be remembered that the Yeomanry Cavalry has not been disbanded or converted. Had the term Yeomanry been synonymous with cavalry, there would have been no need for the inclusion of the latter description in the titles of so many regiments—Montgomeryshire Yeomanry Cavalry, Royal First Devon Yeomanry Cavalry, Royal North Devon Yeomanry Regiment of Mounted

Rifles—all of which show that historically Yeomanry *qua* Yeomanry required further description.

Why, therefore, should not Yeomanry acquire in all good faith the further description of artillery and remain as truly a Yeomanry formation as when described as cavalry? The term is descriptive of the class enlisted, and of the organization, and is as true in this sense of the artillery formations as of many of the cavalry formations. Had all Yeomanry been cavalry and acknowledged as such, their higher organizations would have been termed cavalry brigades and divisions instead of mounted brigades and divisions. This in no wise detracts from their excellence and *esprit de corps*; it is merely quoted to show that the change of status may be over-emphasized, and that the prejudice existing amongst diehards against acknowledging that Yeomanry can be artillery has no historical basis in fact.

The fact is that loose talk had shortened the titles of the regiments and that the terms Yeomanry and cavalry had become in the vulgar estimation, confused. They are Yeomanry still, re-armed as Yeomanry Artillery.

Insistence on this continuity cannot be emphasized too greatly. It is hoped that the appearance of a Royal Colonel-in-Chief for the Norfolk Yeomanry and the inclusion of that regiment on page 230 of the Army List amongst those regiments still armed as cavalry does not argue a mistrust of this contention which the inclusion of His Majesty and of His Majesty the King of Denmark on page 303 would go far to dispel. It would be as well if highly placed cavalry officers were to refrain from stressing the misfortunes of the re-armed regiments. No good purpose can be served and many eligible officers and men are discouraged. Rather let reaction hide its head and let the past lead the way to the efficiency of the future where, supported by insight and understanding, the goal common to us all of preparing to defeat the country's enemies, is the aim of our mutual endeavour.

THE AIR EXERCISES

BY MAJOR OLIVER STEWART, M.C., A.F.C.

"AIR MANŒUVRES" was the title of an article by the present writer which appeared in the *Army Quarterly* of October, 1926. In that article the institution of air manœuvres was advocated and the system upon which they should be run was outlined. The objects of such manœuvres were summed up thus: "Not only would they train airmen in a manner far more effective than any other, but they would also clarify the ideas of staff officers and would educate the nation in aerial defence."

Last July the Air Ministry instituted the first air manœuvres upon an almost identical scheme to that suggested in the *Army Quarterly*. The only major differences were that the operations of both sides were, to some extent, pre-arranged instead of being left absolutely to the decisions of the opposing commanders, and that the degree of accuracy attained in the bombing was estimated by a method different from, and better than, that proposed.

These manœuvres, or tactical exercises, as perhaps they should be called owing to the scale and system upon which they were planned, were a success from every point of view. They provided a test of the air defence system—such as it is after two years' development; they gave the pilots and gunners, searchlight operators and aircraft "spotters" practice under conditions approaching those of real warfare; and, perhaps most important of all, they provided a striking aerial object lesson for the public living in, and around, London.

There is little doubt that the time which has elapsed since the 19th of May, 1918, when the last aeroplane raid on London was launched, has dimmed the memory of such events in the public mind. Before the air exercises the London public had almost forgotten its experiences of the war and it had scarcely noticed the progress that had been made in fighting aeroplanes since the war. The air exercises suddenly and vividly brought back war memories almost in their original clear colours, and they also indicated that aerial bombing, during the last nine years, has become much more formidable.

The exercises took place between 6 a.m. on Monday, the 25th of July, and ended at 5 p.m. on Friday, the 29th of July. The general idea was that "Westland" had been attacked by "Eastland" and had been so heavily bombarded from the air that its Government had been forced to retire from the capital (London) to Manchester. To defend Manchester a proportion of the ground and air defences of London had been moved northward.

This part of the general idea allowed for the incompleteness of the defences. (The air defences of Great Britain will not be at their full establishment for another eight years.)

The Eastland commander, when the exercises began, was aware of the organization of the London defences, and was anxious that no further units should be withdrawn to defend other parts of England which he was attacking. Consequently, he detailed a part of his forces, some nine squadrons, to harass all sectors of the London defences.

It was one of the objects of the exercises to find out to what extent the Westland commander could meet these attacks.

The forces comprising the Eastland or attacking force consisted of nine squadrons :

<i>Squadron Number.</i>	<i>Machine Type.</i>	<i>Commanding Officer.</i>
No. 7	Twin-engined Virginia	Wing Commander C. F. A. Portal
No. 9	" "	Wing Commander C. C. Durston
No. 58	" "	Squadron Leader A. R. Harris
No. 11	Single-engined Horsley	Squadron Leader E. A. B. Rice
No. 100	" "	Squadron Leader L. T. N. Gould
No. 12	Single-engined Fox	Squadron Leader T. E. Salt
No. 99	Twin-engined Hyderabad	Wing Commander B. E. Smythies
No. 39	Single-engined D.H.9A.	Squadron Leader H. V. Champion de Crespigny
No. 207	" "	Squadron Leader J. B. Graham

The Westland defending forces consisted of twelve single-seater fighter squadrons and one communications squadron :

<i>Squadron Number.</i>	<i>Machine Type.</i>	<i>Commanding Officer.</i>
No. 1	Siskin	Squadron Leader E. D. Atkinson
No. 56	"	Squadron Leader C. H. Elliott-Smith
No. 111	"	Squadron Leader G. W. Roberts
No. 41	"	Squadron Leader F. Sowrey
No. 3	Woodcock	Squadron Leader J. M. Robb
No. 17	"	Squadron Leader J. Leacroft
No. 19	Grebe	Squadron Leader H. W. G. Jones
No. 25	"	Squadron Leader H. Park
No. 29	"	Squadron Leader R. H. G. Neville
No. 23	Gamecock	Squadron Leader R. Collishaw
No. 32	"	Squadron Leader R. B. Mansell
No. 43	"	Squadron Leader A. F. Brooke
No. 24	Avro, Bristol, D.H.9A.	Squadron Leader W. H. L. O'Neill
(Communications)		

The umpiring was done chiefly by officers travelling in the bombing machines.

The general rules which guided the umpires in assessing casualties when the bombing formations were attacked by defending fighters were interesting. If a formation of fighters met a formation of single-engined bombers, the larger formation was assumed to have brought down half the difference in strength between the two formations. Thus, if 18 fighters met 12 single-engined bombers, the umpire assessed the casualties to the smaller formation at 3 single-engined bombers. If a formation of fighters met a formation of twin-engined bombers, the system of assessing casualties was the same except that each twin-engined bomber counted as two machines. Thus, if 5 twin-engined machines were attacked by 6 fighters, the strengths would have been calculated at 10 and 6, respectively. The umpire would, therefore, have assessed 2 casualties against the fighters.

This system of casualty assessment, rating each twin-engined machine as two machines, is open to criticism. A big twin which is not highly manœuvrable, is often particularly vulnerable to determined attack by a single-seater fighter.

The following is a summary of the day raids :

- First Day :* Eight raids. Objectives Chelsea and Kidbrooke.
Four raids were successful.
Two raids were intercepted by fighters.
One raid was judged to have suffered heavily from anti-aircraft fire.
One raid was abandoned owing to weather.
- Second Day :* Seven raids. Objectives Chelsea and Kidbrooke.
Three raids successful.
Two raids intercepted and destroyed or turned by fighters.
Two raids abandoned owing to weather.
- Third Day :* Six raids. Objectives Chelsea and Uxbridge.
Two raids successful.
Three raids intercepted by fighters.
One raid abandoned owing to weather.
- Fourth Day :* Six raids. Objectives Chelsea and Uxbridge.
Two raids successful.
Two raids destroyed by fighters.
Two raids failed owing to weather.
- Fifth Day :* Five raids. Objective Uxbridge.
One raid successful.
Two raids intercepted by fighters.
One raid abandoned owing to weather.
One raid attacked by fighters as it reached its objective (Hillingdon House, Uxbridge).

The night raiders usually flew singly. Most of those which passed through the lighted areas were intercepted by fighters. On

the first night of the exercises operations were cancelled owing to the weather, although, in time of war, raiding would have been possible.

The use of single machines permitted almost continuous raiding at night. On the second night there were 28 raids and on a subsequent night there were 22. Of that 22, 14 which passed through the lighted area were attacked and only 8 got through the defences. Indeed, the chances of any machines penetrating the lighted area without being found by the searchlight beams and attacked by fighters were found to be negligible.

By day, the system employed during the exercises was this. A bombing formation of 3, 6, or 9 machines left its aerodrome and flew out to sea. It then turned and approached the coast. The sound of its engines was heard by the ground observation posts, which are dotted all round the coast, and these posts immediately sent messages to headquarters.

As the raiders pass over the coast messages from the ground observation posts arrive at headquarters, so that the officer commanding any particular sector has immediate information of the movements of raiding aeroplanes. He can, therefore, rapidly lay his plans to suit the varying conditions and can endeavour to have fighters ready to intercept the raiders.

One of the obvious methods employed by the raiders in order to make the fighters' task as difficult as possible was to fly on a false course during their approach to London, and suddenly to change course when some ten or twenty miles from their objective.

This change of course, occurring after the fighter patrols had left the ground, could be signalled only to fighters having wireless. The fitting of wireless and other accessories, on the other hand, naturally reduces the performance in speed and climb of the fighters, and lessens their chances of reaching the raiders even when they know where to find them. On the whole, as will be shown later, performance was shown by the exercises to be of much greater value than wireless.

Examination of the raids which were carried out during the exercises indicates that two points have been brought out with overwhelming force. The first is that the crux of an aerial defence scheme is an effective means of signalling to defending aircraft the position at any moment of raiding aeroplanes, and the second is that performance in both fighting machines and bombers is of first importance. Indeed, the exercises indicate, what the writer has suggested in his "Strategy and Tactics of Air Fighting," that aerial warfare is very largely a warfare between aircraft designers.

Take first the problem of signalling to defending fighters the position of raiders. The exercises have shown that no better means of signalling have been evolved than those employed in the late war. That is, searchlights by night and anti-aircraft shell-bursts by day. Wireless telephony to fighters can at best give a map reading and a height or directions for altering course. But, by the time the leader of a fighter patrol has found the position on the map that has been wirelessly to him, the raiders will be miles away and may have altered course. The time factor in the air upsets the best and quickest wireless information. The directions for altering course sent by wireless are equally ineffective. In fact, wireless as a medium for signalling the position of raiding aircraft, paradoxical as it may seem, is far too slow. The time spent in getting in touch with fighters in the air and in giving and repeating clearly the shortest message is terribly long relative to the speed of movement in the air.

The exercises, therefore, confirmed the view, fairly generally held before they took place, that wireless cannot be used effectively for signalling the position of raiders to defending aircraft. For doing this, it may be repeated, only two effective methods are known. The searchlight at night and the anti-aircraft shell-burst by day.

Examination of the results of the exercises shows that almost all the raiding aeroplanes which went through the lighted zone at night were found and attacked by defending fighters. The searchlights, working more efficiently than they have ever done, remained covered until the sound-locators had given the bearing of the hostile aircraft. Then two or more searchlights would uncover and, in a moment, the raider would be caught at the intersection of the light beams.

The pilots of fighting aircraft, patrolling singly in given sectors and at given heights, had only to watch for the uncovering of searchlight beams and, immediately, to fly towards the place where the beams intersected.

With the help of the searchlights the fighters should have been able to bring down a large proportion of the night raiders. The fighters would launch their attacks in ideal circumstances. They would know the position of the enemy but the enemy would not know from which direction to expect attack. Under these conditions close range surprise attacks would be frequent and the raiders would be bound to suffer heavy losses.

By day, however, a very different state of affairs prevailed. Many, indeed an inordinately large number, of the day raiders got through unobserved. This fact emphasizes the difficulties of

picking up aeroplanes from the air. Those difficulties are still not generally appreciated.

Even when the sky is perfectly clear one machine, by manœuvring correctly, can frequently approach to within point-blank range of another without having been observed. The factors which make this possible are five. The speed of movement in the air, the fundamental general shape of all heavier-than-air craft, the atrophying of the sense of hearing by the roar of the engine, the unavoidable blind spots, and the immense three-dimensional space to be searched.

In the air speeds of 130 m.p.h. are common. If two machines are approaching each other, their combined speed may, therefore, be 260 m.p.h. Human beings are not yet accustomed to such speeds. In normal everyday experience they rarely have to look out for a vehicle going at more than 30 miles an hour. The town dweller is accustomed to judging distance and looking for road vehicles travelling at about 30 m.p.h. If cars suddenly began to travel at 80 m.p.h. in crowded areas, many people would be run over by cars which they had never observed, or which they had thought to be so far away as to make crossing the street safe. They would not be used to scanning the road at a great distance. Yet cars which were out of sight one second might be dangerously close the next second. How much more would be the risk of not seeing or of misjudging the distance of a vehicle which might run you down if speeds of 130 or 200 m.p.h. were attained! Yet frequently, as it has been said, aeroplanes approach each other and depart from each other at combined speeds of 260 m.p.h.

The second and third factors which make the spotting of other aircraft difficult are the fundamental shape of heavier-than-air craft, and the atrophying of the sense of hearing by the roar of the engine. The ordinary aeroplane consists in the main of one or two planes and a slender fuselage. When looked at from above or below there is a fairly big area of plane and fuselage to catch the eye, but looked at from front or rear very different conditions occur.

Viewed from immediately in front, a biplane is nothing more than two thin lines and a dot, the planes and fuselage. The writer has not worked out the proportion of surface which is presented to the observer's eye by the front of an aeroplane compared with the top. It could easily be done (by means of a camera) and the result would be instructive. It is certain, however, that the eye has considerably less than one-tenth of the surface to pick on when it looks at an aeroplane from the front compared with looking at it from above or below.

Now the anti-aircraft spotter looks at the aeroplane from the best direction, that is from below, and he is aided in judging direction by the engine's sound. But the aeroplane pilot looks at another aeroplane frequently from the worst direction ; nearly the same level, and he cannot hear the sound of any engine but his own. The sense of hearing is perhaps the most important in spotting aircraft and, consequently, the airman's task is infinitely more difficult than the ground observer's.

The unavoidable blind spots and the immensity of the space to be searched in an aeroplane add to the airman's difficulties, and have been given as the last two factors which make the discovery of enemy aircraft from the air so difficult.

Compare the airman once again with the ground observer. The ground observer (clear weather is assumed for this discussion) has no obstruction of any kind above him and the entire space which he must search is open for his inspection. It amounts to about a hemisphere with a radius of the length of sight. The airman, on the other hand, sits in a kind of framework and wings stretch on either side of him. Whether the machine is monoplane or biplane, whether it is of cantilever construction or is braced with external wires and struts, the result will be nearly the same. Huge areas of sky, increasing as the distance increases, will be blocked out of view. A thin strut near the airman's face may blot out miles of sky a short distance away. The airman, therefore, has his observation field partly shut out from view, whereas the ground observer has a perfectly clear view. But, whereas the ground observer has to search only the hemisphere above him, the airman must search a complete sphere of air all round him. Other machines may be below him as well as above him.

But perhaps sufficient has been said to indicate the enormous difficulty which an airman must contend with in searching for and spotting other machines on a day when the visibility is good and the sky clear.

There is, as it has been said, in actual warfare, however, a form of signalling which permits the ground observer to point out to his own airmen the position of hostile machines ; and the exercises failed to take this form of signalling into account when staging air warfare during the day. The omission of any imitation of anti-aircraft shell-bursts was serious because it put the defending fighters at a very great disadvantage and departed from a realistic imitation of air war.

Anti-aircraft shell-bursts could easily have been imitated so far

as their signalling effect goes by dropping the "match" fireworks which were used at the R.A.F. Display or by firing Very lights. The "match" fireworks are struck on a roughened surface on a strut or other convenient place and thrown overboard. After they have fallen a short distance they burst, leaving a white smoke puff very similar to, although much smaller than, the bursting of an anti-aircraft shrapnel shell.

The large number of raiding machines which got through without being observed by fighters in day-time can be accounted for almost entirely by the absence of anti-aircraft fire or any imitation of it. In future exercises it is imperative that some means of imitating anti-aircraft fire should be employed when raiders are flying through areas patrolled by defending fighters.

And now perhaps it may be clear why the exercises emphasized so strongly that effective signalling of the positions of hostile machines to defending fighters is the crux of the air defence scheme.

By night, let it be repeated, few raiding machines got through the lighted area without being found by the searchlights and, consequently, by the fighting aeroplanes. By day many raiding machines got through without being found by the fighting aeroplanes.

Looking at the manoeuvres solely from the airman's point of view, therefore, we may conclude that defending aeroplanes must have adequate help from anti-aircraft forces (searchlights by night and anti-aircraft fire by day) if they are to find and bring down hostile machines in large numbers.

The value of anti-aircraft fire as a means of shooting down hostile aircraft, and whether it is an economical method of bringing them down, must be left to the decisions of anti-aircraft gunners. Certain it is that, from the airman's point of view, anti-aircraft fire has a powerful moral effect and—ininitely more important—it acts as the best signalling device. It looks, moreover, as if the bursting shell or the intersecting searchlight beams must remain in the future the best signalling devices by day and by night. No map-reading, height, course and speed indications can by any stretch of the imagination give so quickly and so accurately the position and course of a hostile machine as the direct visual signal given by bursting shells.

It must also be remembered that a defending pilot who is pestered with maps and wireless messages is hampered in his work. When he does discover an enemy he may find himself in an unsuitable position for launching an attack. A defending pilot searching the sky for aircraft or anti-aircraft bursts, on the other hand, can

concentrate almost his whole attention on keeping his patrol together and in a good attacking position.

The system of finding hostile aircraft by looking for anti-aircraft shell-bursts also eliminates the chances of a pilot mistaking other friendly machines for those of the enemy.

It may be concluded therefore that, although it may be impossible to bring down (the matter is admittedly open to debate) aircraft by means of anti-aircraft fire without great waste of ammunition or to prevent them from reaching their objective, such fire yet serves a valuable end in signalling the approximate position of hostile machines. It is the complement, therefore, to aircraft in defence. It is also clear that defending fighters do remain the only sure and absolute defence against raiders. Given adequate performance, the defending fighter will bring down, or turn, the raider if it finds it soon enough. The fighter is more than a match for the bomber, assuming an approximately equal standard of design, and can even take on superior odds in bombers with a great chance of success.

This brings us to the second point which it has been said was brought out by the exercises, the importance of performance. Aircraft performance is intimately bound up with both tactics and time.

Apart from numerical strength, the speed and climb of our fighters and day bombers must be nearly equal to the speed and climb of the fighters and day bombers of any enemy if we are to have a chance of defending ourselves effectively.

Modern day bombers can reach the centre of London in about—on the average—twenty minutes from the time they cross the coast. Assume that they are picked up as they cross the coast. The message goes to the operations room that, for example, nine hostile day bombers flying at 18,000 ft. on a north-west course have been observed. The moment this message arrives an order to an appropriate squadron of defending fighters is sent, instructing them to intercept the raiders. The detailed squadron must get into its machines, start up its engines, take off and be at 18,000 ft. or more within about eighteen minutes.

The scheme for continuous patrol, with the present size of defending forces, is unpractical. An enemy could easily defeat such a scheme by sending over at long and irregular intervals heavy bombing raids, which would be able by sheer weight of numbers to overcome the defending fighters. The only practical defensive scheme at present is that employed in the exercises of sending up defensive patrols the instant hostile machines are reported.

The writer spent several days on the aerodromes of defending fighter squadrons and had an opportunity of watching the system which has been adopted for getting the machines into the air in the shortest possible time. There are three degrees of readiness. In the first : " Readiness " the machines are wheeled out on to the aerodrome and the engines tested. In the second : " Standby " the pilots are in their flying-kit with parachutes attached and the engines are run up every half-hour. In the third : " Stations " the pilots get into their machines and the engines are started ready to take off on command. This drill is evolved to help the fighters to catch the raiders before they reach their objectives. Yet in spite of the excellence of the drill and the rapidity with which it was carried out, every ounce of climb that the fighters could achieve was needed to enable them to be high enough to attack the raiders.

With normal gun mountings (the guns of fighters fire straight forward through the field swept by the airscrew) it is impossible for fighters to carry on a running battle while flying below raiders. They must attain at least the same level as the raiders and they have an advantage if they can engage from a position well above the raiders.

We come, therefore, to the crucial point that performance is urgently needed by the defending fighter in order to allow it to climb up to and catch the attackers, and that the attackers equally require performance in order that they may fly high enough and fast enough to evade the defenders.

Aircraft performance is the essence of all aerial warfare, offensive or defensive. In the air, speed and climb are, in the present state of affairs, infinitely more valuable than the number of guns or the weight of projectiles. If the technical equipment of any air force were wisely chosen, almost everything would be sacrificed to the one essential—performance.

And looking at the R.A.F. fighters, day bombers and general purpose machines one is struck by the fact that some of the day bombers and general purpose machines are faster than many of the fighters. The conclusion is that the bombers have been, on the whole, better chosen than the fighters.

Our fighters require improving ; their rates of climb and speed are not high enough. And this leads to a technical consideration. All standard R.A.F. Fighters, Gamecocks, Grebes, Siskins and Woodcocks, are fitted with radial air-cooled engines. All standard R.A.F. bombers, Virginia, Hyderabad, Fox, Horsley and D.H.9A. are fitted with water-cooled engines.

Now it is not the writer's intention to venture into the whirl of the furious battle which is now raging between the apostles of air-cooled aero-engines and of water-cooled aero-engines. But this much can be said and will be admitted by both sides. The water-cooled engine has, so far, been the engine invariably chosen by designers who aim at extremely high speeds. With one exception the British, American and Italian seaplanes entered for this year's Schneider Cup Race are all fitted with water-cooled engines ; and the Schneider Cup machines give a good indication of the trend which advanced research work is taking. A water-cooled engine may be more vulnerable in war, but the majority of experienced fighting pilots, if asked if they would prefer a less vulnerable engine or an additional 3 miles per hour in speed, would choose the 3 miles per hour in speed.

If the water-cooled engine can give our fighters a better performance in speed and climb (in climb the case for water-cooling is by no means complete), there is a strong reason for fitting out two or three squadrons at least with single-seater fighting machines with water-cooled engines. Certainly the performance figures of the Fox, the Horsley and the Fairey IIIF, carrying full loads of guns and bombs, when compared with the performance figures of fighting scouts carrying nothing but the pilot and his machine guns, indicate that the water-cooled engine might enable the designer to give the fighters better speed and climb.

In this matter of air and water cooling it would be dangerous and unnecessary to lay down a definite line of action one way or the other. Yet that is precisely what the Air Council seems to be doing ; and it is particularly unfortunate that the line officially adopted is diametrically opposed to that which experience suggests is the more promising. All R.A.F. standard scouts have air-cooled engines, all Standard R.A.F. bombers have water-cooled engines. Yet a review of the situation shows that, although no definite line can yet be drawn between the machines best suited for water-cooled and for air-cooled engines, there is indication that some squadrons of fighters should be equipped with machines with water-cooled engines.

Two main lessons, then, may be said to have been emphasized by the air exercises. First, that great care should be exercised to avoid the danger of neglecting anti-aircraft defences : guns, search-lights and sound locators. These have been shown to be the essential complement to fighting aircraft ; and second, that much more attention must be paid to increasing the performance of R.A.F. fighting aircraft. A period of intensive high-speed and climb

research is required. The Air Ministry's decision to enter its high-speed research machines for the Schneider Cup Race was wise. It provided a much needed incentive to designers to produce faster machines, and in a year or two the good effects of that decision will be seen in standard machines. Record breaking might be used to increase the climb of our machines by giving a similar incentive.

Adequate anti-aircraft defences and increased performance in fighting aircraft are the two needs which have been vividly demonstrated by the air exercises.

A PENAL BATTALION

[This article is from a book, "The Gallant Company," by Sir John Fortescue, K.C.V.O., which is being published by Messrs. Williams and Norgate, Ltd., 14 Henrietta St., Covent Garden, W.C.2, at the price of 7s. 6d. net.]

A FEW years ago a French author published a book under the title *Dante n'a rien vu* (Dante saw nothing), which upon perusal proved to mean that the Hell seen in a vision by Dante was as naught compared with the hell actually existing in the French penal battalion—*le Bataillon d'Afrique*, familiarly spoken of as "le bat. d'Af." It is not generally known that at one time we had not one but many penal battalions, one and all of them at first quartered in the West Indies. Some of them bore strange names such as, the Royal York Rangers, but the most important was the famous regiment known for long as the Sixtieth and now called the King's Royal Rifle Corps. This regiment made a most respectable beginning in the American colonies as the "Royal Americans"; but after the loss of those colonies they sank down into a perpetual garrison for the West Indies. At one moment they had as many as ten battalions. One, the Fifth, made itself a great name in the Peninsular War. Most of the others were filled with foreigners, often deserters from foreign armies and with outcasts from other regiments who were delivered from the punishment due for their misdeeds by their consent to be transferred to the Sixtieth. Thus for thirty to forty years the Sixtieth and certain others, such as the York Rangers, above quoted, were known as "condemned corps," being composed of the worst criminals in the army.

Nor were the officers much better than the men. The command of such gangs in so deadly a climate offered few attractions to men of worth and honour, and no respectable officer would condescend to belong to them unless it were for a few months as a step to promotion. There was, however, one notable exception to this rule. A certain Colonel Turner, who at one time commanded the York Rangers, by some mysterious gift of personality, contrived to control his battalion of double-dyed scoundrels without the slightest difficulty

and with little infliction of punishment, and to convert them into smart, well-conducted, docile, and almost contented soldiers. How he did it, no one knew ; but that he did do it is certain ; and his name was consequently held in deep respect throughout the Army.

At length the whole system of penal battalions in the West Indies was condemned. It seems to have been based upon the argument that, since two years' service in those pestilential islands sufficed to destroy any battalion, it was better that a bad battalion should perish than a good. But, on the other hand, as a bad battalion was not only useless for any good purpose but might also be dangerous, it was decided to allow all the regiments of the Line to take their turn of service in the West Indies. Of course they died fast ; but about the year 1840 it was realised that much of the unhealthiness of the troops was due to preventable causes ; and in these days, with the help of modern science, yellow fever has been disarmed of all its terrors ; so that if white troops were now sent to the Antilles they would be as healthy as in England.

But there was another quarter of the British Empire which was far more deadly than the West Indies, namely the West Coast of Africa. The average annual number of deaths among British soldiers in Jamaica, for instance, was twelve in a hundred ; on the West Coast it varied from seventy-five to eighty. The best African settlements had from the beginning been under the control of a chartered company, but with the abolition of the slave trade the occupation and the resources of that company came to an end. Moreover, a new settlement had been founded in 1794 at Sierra Leone ; and, as somebody must look after them, the Crown took charge finally of the whole. But it was certain that Parliament would never allow British regiments to be consigned regularly to certain destruction ; wherefore another penal battalion was formed for this particular service—the last of its kind—under the name of the Royal African Corps. It is not easy to discover much about it, for its men and officers died too fast to leave much trace behind them. Entries abound in the Commander-in-Chief's letter-books to the effect that the sentence of a court-martial upon some hardened criminal is confirmed, but will be remitted if the culprit consents to serve in the Royal African Corps ; but these do not help us much. It is also certain that there were in it companies of coloured as well as of white men, and that they did duty at Cape Colony as well as on the West Coast, which may account for the undoubted fact that they possessed at least a few good officers. In truth, such officers are to be found still in the most uninviting parts of the Empire,

drawn thither perhaps by the spirit of adventure, perhaps by desire to atone for youthful follies, perhaps from sheer unselfishness by desire to relieve an impoverished parent from all burden or even to restore him to comfort. For an unhealthy climate has at least this advantage, that a man who can manage to live in it may find himself speedily in high station simply through the death of his superiors, and, if he do well, may rise rapidly. Even forty years ago a captain in a West India regiment might, through sheer force of survival, come to be practically absolute ruler over a province as large as the British Isles.

As it chanced, the place where troops were most needed was the unhealthiest of all the British settlements, Cape Coast Castle. Immediately at the back of them was a friendly but not very warlike tribe, the Fantis, and beyond them a formidable military power, the Ashantis, brave, disciplined and rapacious. The Ashantis had raided the Fantis and even the European settlements repeatedly since 1807; their attitude had grown steadily more menacing; and at the end of 1823 their king intimated to the authorities at Cape Coast Castle that he intended to drive them into the sea. The Governor of West Africa and the colonel of the Royal African Corps at this time was one Sir Charles Macarthy, a capable soldier and an enlightened ruler. He had served in the West Indies through the two deadly campaigns of 1795 and 1796; he had later belonged to the Light Brigade which had been trained by Sir John Moore at Shorncliffe in 1804; he had then been sent out as major to a fine corps of backwoodsmen in New Brunswick, and in 1812 had found himself lieutenant-colonel of the African Corps and Governor of the West Coast. He was a man of boundless energy who knew not the meaning of fear, and was delighted to find himself commander-in-chief in a small way of a field-force in face of the enemy.

The said field-force was of a curious description—a few thousand native levies and friendly tribes, all of them in deadly fear of the Ashantis, a handful of black militia, under two hundred strong, officered by merchants of Cape Coast, a few black soldiers of a West India regiment, and two or three weak companies of the Royal African Corps, perhaps two hundred white men. In all there may have been four hundred men, black and white, whom he could trust more or less and half that number whom he could trust absolutely. By all accounts the Ashantis were advancing in twelve bodies upon a front of a hundred miles. Macarthy distributed his own men in four bodies upon a like front; manœuvring to attack the most formidable of them himself in flank, while another column

under Colonel Chisholm, forty miles to his right, should close in upon its rear. He had enormous difficulties with his transport, for in a country where horses, mules, asses and oxen cannot live, he was obliged to depend entirely upon native carriers, who did not fancy meeting the Ashantis. However, on the 4th of January he began his advance through the forest, and within a week found himself deserted by all of his carriers. The difficulty was overcome by an energetic officer, Major Ricketts, who commanded the rear-guard and who impressed fresh carriers and drove them along at the bayonet's point. Six days later he heard that some of his native allies whom he had pushed forward to cover his front were turning back and deserting him; and on the 19th of January he was obliged to send Ricketts with a company of Royal Africans and the black militia to stop them. After a terrible march of twenty miles under tropical rain and through mud waist-deep, Ricketts arrived on the 20th just in time to arrest, by violent measures, the flight of the friendly tribes. They reported the Ashantis to be close at hand and in great force; and Ricketts at once sent a message to warn Macarthy. By the dawn of the 21st, Macarthy, always indefatigable, was on the spot, but he absolutely declined to believe that the Ashantis were anywhere near him. The native allies, however, presently gave the alarm, and Macarthy realised that they had completely outwitted and outmanœuvred him. They had deceived him by false reports and feint movements; and there they were now, in his front, concentrated in great force. There could be no mistake, for every subordinate chief of the Ashantis had his own call on the horn for his own men; and a native with Macarthy was able to identify a great many of them. There was nothing to be done but to make the best possible disposition for a fight, which Macarthy did with great promptitude and skill, drawing up his troops at the back of a stream which barred the enemy's line of advance.

At two in the afternoon the action began, and for two hours Macarthy held his own, repelling the enemy with great slaughter. But after two hours Macarthy's ammunition began to fail. He had rushed to the English commissary, who had been charged with the duty of bringing up the reserve ammunition and who had come up in the middle of the fight. The unhappy man confessed that the carriers had thrown down their loads and vanished into the forest, and that he had arrived on the scene alone. Furious with rage, Macarthy threatened to hang him on the spot; and, indeed, the poor creature only saved his neck by hiding himself. By this time

most of the native allies had fled from the field, but a few were still fighting bravely round the steady ranks of the Royal Africans. But they were rapidly drawing to their last cartridge, and Macarthy tried, while there was yet time, to organize a regular retreat. He was too late. The river, which had protected his front, had fallen in the course of the action, and the Ashantis, who were four or five to one, threw forward both wings across the water and surrounded the few brave men who still held out. Macarthy, already wounded in two places, was soon killed, and with him eight more white men, including the unlucky wretch whom he had threatened to hang. Another white man was taken prisoner. Ricketts and another officer, both of them wounded, made their escape with a few of the disciplined or half-disciplined men of the militia and African Corps. But four out of five of these had fallen, and the native allies had long fled away. It was a great and crushing victory for the Ashantis.

Weary and exhausted by the exertions of three arduous days and weak from pain and loss of blood, Ricketts had none the less but one idea which possessed his whole mind and soul—he must at all costs find Colonel Chisholm, tell him of the disaster, and warn him to fall back at once for the protection of Cape Coast Castle before the Ashantis could reach it. With the miraculous strength that comes to men when they put before them supreme duty which must at all costs be fulfilled, he staggered on through the steaming forest for hour after hour and mile after mile until at length at a point nearly thirty miles from the battlefield he came upon two of his own men, of the African Corps, who were the extreme point of one of Chisholm's advanced parties. He asked if they knew him, but they could not recognize the ghastly face until he told them who he was. They were only two privates of the stamp usual in the Corps, hardened criminals, scarred by the lash and with little to hope for in the world ; but they took it in turns to carry him on their backs for some miles to a native village, where they could obtain for him some refreshment. But Ricketts could not rest until they had found Chisholm ; so then the two criminals wove a rude basket, and, having impressed a native guide, made shift to carry their officer on their heads by turns. Possibly one or other of them may have begun life as a porter in one of the London markets, possibly they may only have copied the fashion of the natives, who carry everything on their heads. But, however that may be, they fared on through the close and stifling forest, one bearing the wounded Ricketts, the other slashing away the branches that impeded their passage until Chisholm was found. It is exertion enough for a white man

to walk for miles without a burden through dense tropical growth, but these men for hours bore a load of over two hundredweight. If ever three men did their duty under sore trial it was this obscure major and his two faithful outcasts. They belonged, it is true, to a penal battalion, but they could not have behaved more nobly if they had been of the First Guards.

So Chisholm fell back upon Cape Coast Castle and did his best, with all of his officers sickening round him, to hold the Ashantis at a distance. But they were a formidable foe. The English prisoner whom they had carried away with them was amazed at their discipline, their order and the regularity with which they performed their duties ; and the native allies of the British held them in abject terror. In June the Ashantis advanced in great force upon Cape Coast Castle, and the natives from all the surrounding villages came flying by thousands for safety into the fort. The castle yard was so densely crowded that a man could not cross it without treading upon some human creature, man, woman or child. Soon there were more mouths than could be fed. Dysentery, smallpox and famine played havoc among the refugees ; the filth and the stench in the overcrowded space was appalling, and heavy rain swept the foul matter into the tanks of drinking water. The troops were little better off than the natives. Even the officers had neither meat nor flour, and but little rice. And the sun beat down ruthlessly ; and the Ashantis, too cunning to attack the fort, laid waste the country round, and laughed. Steadily men and officers of the Royal African Corps died of exhaustion, want of food, and foul drinking water. Seldom have British troops passed through a more terrible time. Had not a ship come in from Sierra Leone with provisions, every soul must have perished.

A draft of officers and men for the African Corps arrived shortly after, and the Ashantis, calling in their marauding parties, again concentrated before Cape Coast Castle. The king's tent was plainly visible through a telescope, and his chiefs could be seen flaunting themselves in the uniforms of the British officers and men whom they had slain. It was an anxious time, for Macarthy's depôt ammunition had been captured after his disastrous fight, and ball was so scarce in the garrison that every scrap of pewter and lead at Cape Coast had been taken to make bullets and slugs. However, it was thought best to take the offensive, and after an indecisive sally it was observed that the Ashantis were active in demonstrations of attack. Another sally proved that they had retreated. Famine, smallpox and dysentery had played havoc with them too, to such

effect that discipline had broken down and that whole tribes had deserted to their homes. The demonstration had been made by marching the same men round a hill from the forest into the open, again into the forest and again into the open, after the manner of crowds at a theatre.

The year 1824 passed away without further serious operations ; but the men and officers of the African Corps none the less died. Even Chisholm, after fifteen years of the West Coast, succumbed to the climate at last, and left many mourners of all races and colours behind him. Fresh drafts arrived in the spring of 1825, and Sir Charles Turner, the officer who had such magical power over bad characters, took over the Government of Sierra Leone. He was dead within twelve months ; and it fell to another officer to meet the next invasion of the Ashantis, which was directed against Accra in 1826. The British force this time was quite respectable—a detachment of the Royal African Corps, five hundred disciplined natives officered by four white merchants of Cape Coast Castle, and ten thousand native levies. The disciplined men formed the centre, sharing between them three hundred and eighty muskets, of which the Royal Africans probably carried about one-third ; and there was also a party of rocket men and two small guns. With five thousand levies on either flank these marched out to meet the Ashantis, and on the 7th of August, 1826, the decisive battle was fought. The Ashantis, following their usual tactics, tried to envelop both flanks, but were foiled by a counter-attack of the natives. Then by means of taunts they succeeded in tempting some of the natives in the centre to advance, whereupon they broke through the native levies upon one wing and fell full upon the flank of the imprudent men who had come forward. There were some unpleasant minutes until a tiny reserve of the Royal Africans was thrown in to repel the flanking attack of the Ashantis, the work was completed by a few rockets and a round or two of grape ; and then, the native levies having rallied, the whole line advanced, and the Ashantis gave way. Then followed a wild scene of slaughter. The native levies had many old scores to pay off, and they closed with their enemy in earnest with the knife. Acres of dry grass had been kindled by the rockets and in the dense clouds of smoke with the sun blazing down overhead, the savages, mad for blood, cut and slashed and ripped and mangled with unspeakable fury until they could do no more. By one o'clock in the afternoon, after three hours and a half of desperate contest, all was over. Five thousand of the Ashantis had fallen ; whereas the victors counted but eighteen

hundred killed and wounded. The British lay on their arms through the night, listening to the wail of the Ashanti women as they lamented their dead. When dawn came the Ashantis had vanished. They had been for nearly twenty years a dangerous menace to the British settlements ; and now at last they were beaten to the ground and were fain to sue for peace. The negotiations were prolonged for months and years, but in 1831 the Ashantis agreed at length to pay an indemnity and to give security for good behaviour. Nor was there further trouble with them until 1873.

Long before that the Royal African Corps had ceased to be. It had done its work and taken its wages, which were the usual wages of the criminal—death. They fought in dozens of petty actions, and without them the Ashantis could hardly have been subdued. They were only once tried to extremity and then they responded, not with the baseness of scoundrels but with the nobility of heroes. Even the best of us may take an example at least once from the dross of the British Army, and may hope that if ever it is our lot to pass, as they passed, through the furnace, we may be found, as they were, to be pure gold.

MILITARY OPERATIONS: FRANCE AND BELGIUM, 1915 *

(History of the Great War, based on official documents, by direction of the Historical Section, Committee of Imperial Defence.) By Brigadier-General J. E. EDMONDS, late R.E., and Captain G. C. WYNNE, K.O.Y.L.I.

WHEN the last volume of this history was published it was announced that its successor would cover the whole of 1915. The present instalment, however, does not go beyond the end of May, 1915, and even so omits both the Aubers Ridge disaster (9th of May) and the not much more successful Festubert (15th-16th of May), which are reserved along with Loos for another volume. It may fairly be surmised that the effort to compress the whole year into one volume has been largely responsible for the long interval, rather over two years, which has elapsed since the "First Ypres" volume appeared, but none of General Edmonds' readers will regret the decision to give 1915 two volumes. It has allowed him space to tell the story in sufficient detail to do justice to individual units and to show how the fate of the day often, as in previous wars, turned on some relatively minor incident. At Neuve Chapelle, for example, the First Army missed achieving a really substantial success largely through the loss of direction by one battalion and the failure to cut the wire on the extreme left of the position attacked: moreover, if the main conclusions to be drawn from most of the operations described come to much the same thing, it is well to have the paramount importance of the ammunition question and of the difficulties of the higher commanders in influencing, much less controlling, a modern battle well illustrated and brought home not by one example but by several.

Readers of the volumes dealing with 1914—one would like to have a qualifying examination in them made compulsory on all candidates for the House of Commons—will know what to expect

* Vol. I. London: Macmillan & Co. 12s. 6d. net; with a separate case of maps, 5s. 6d.

from General Edmonds. The story is lucidly and forcibly told, with a good sense of proportion, a balanced judgment, a great power of compression and of selecting the relevant and important facts. The occasional "retrospects" and "summaries," notably that dealing with "Second Ypres" up to the successful withdrawal from the advanced line on the night of May 3rd-4th (pp. 296 ff.), are admirable, the enormous difficulties which confronted the B.E.F. and its commanders are fully appreciated—what was done is clearly and succinctly told, why it was done, often why it had to be done, is candidly explained: much valuable information about what was going on "on the other side of the hill," which has been obtained from the Germans, is very well summarized in "Notes" at the end of the chapters, by which means the reader is able to see what might have been done without getting the impression that it necessarily should have been done at the time and with the information then available.

In preparing this volume General Edmonds has had special assistance from Captain G. C. Wynne, of the staff of the Historical Section, who wrote the first drafts both of the account of Neuve Chapelle and of the important chapter on "Munitions and Man Power," and his name now appears as part-author on the title page. He has also had the advantage of having Major Becke to prepare the maps and sketches which are essential in dealing with so complicated a story. Sketch A, for example, makes the topography of the Ypres Salient much easier to follow, and though the hypercritical may perhaps object that some of the "sketches" of Second Ypres almost require a microscope, this criticism only applies to those which include the French and Belgian fronts.

It may perhaps be argued that one loses something by not having the 9th of May and Festubert described in the same volume as Neuve Chapelle, particularly as in one sense the whole story of 1915 is that of a series of experiments, of attempts to break down the deadlock set up on the Western Front at the end of November, 1914. But if the volume might have included the unsuccessful attempt to repeat Neuve Chapelle on a larger scale and without the mishaps which had marred the success of that first experiment, without becoming unduly large—it only contains 360 pages of text and about 50 of appendices as against over 500 pages of the First Ypres volume—Loos could not have been got in, and, after all, the failure of May, 1915, has an even greater bearing on Loos than Neuve Chapelle has on it. General Edmonds brings out sufficiently clearly the relations between the First Army's offensive

and the Second Army's simultaneous defensive, and he may be relied upon to explain in his next volume the relation of Neuve Chapelle to the later offensives.

If 1915 was a series of experiments—Second Ypres was an experiment too, the Germans using gas for the first time—it was a series conducted under crippling disadvantages. The expansion of the British Army in France meant that staffs had to be rapidly improvised, that officers found themselves pitchforked into posts of whose duties they had no experience or entrusted with the handling of units far larger than they had ever been allowed to contemplate, this in the face of the enemy and with no opportunities for preliminary practice. Similarly the battles of 1915 had to be fought largely with extemporised soldiers as well as extemporized formations, for though it was wonderful how the survivors of the Old Army managed to hand on their traditions to the recruits who replenished the depleted ranks of the old Regular divisions (*cf.* p. 335), the trenches afforded few chances for completing the training of those recruits in anything but the arts and crafts of trench warfare, while extemporized Regular divisions like the Eighth never had a real chance of getting together as divisions before they had to take over part of the line. There were no chances in 1915 for a division to be out at rest long enough for a proper divisional training, and units were greatly hampered in their ever-recurring task of reconstruction and team-building by the wastage of trench warfare, specially heavy in that first winter of improvised defences, an almost total lack of "trench stores" and appliances and only very imperfect arrangements for making life in trenches something less than intolerable,

General Edmonds has admirably summarized the story of those winter months, though one would have been glad could he have allowed this topic rather more space. He has no room, for example, to bring out the tragedy of the Twenty-Seventh and Twenty-Eighth Divisions, formed in haste of Regular units from India and the Colonies, plunged almost straight from the heat of the tropics into the chills and damp of a Flanders winter into about the worst apologies for trenches on the British front, and wasted to nothing by trench-feet and other maladies without getting a fair chance at their enemy. But if anything had to be sacrificed it is the details of the period of stagnation, full of interest though they are; above all one would not have curtailed in the least the all-important chapter on Munitions. It is essential to a fair appreciation of what was done and what was not done: both Neuve

Chapelle and Second Ypres pivot on the question of guns and shells, and the greatest of all the handicaps by which our Army was hampered in 1915 was the lack of the most essential where-withal to injure its enemies. What heavy guns we had were mostly out of date, like the old 5-inch howitzers first used at Omdurman and the 4·7 inch "cow-guns" of the South African War, worn out and inaccurate weapons, which could not compete in range with the German guns against which they were matched, which could do no counter-battery work and were incapable of the accurate shooting needed for the close support of infantry in trench warfare. It was hard indeed on our artillerymen to have been saddled with such weapons, and harder still that they should have been so terribly handicapped by shortage of ammunition. Lack of ammunition is the *motif* which runs throughout the book. There is a table on p. 222, giving the ammunition expenditure of the field batteries during the first three weeks of Second Ypres, which makes it almost incredible that any successful defence could have been put up; indeed the real marvel is what the artillery managed to do with its scanty ration of shells. The artillery, of course, had not suffered anything like as heavily in 1914 as the infantry, and still included a far higher proportion of trained officers and men (p. 32); indeed, when General Edmonds speaks of the Seventh Division at Neuve Chapelle as "to all intents and purposes a new formation" (p. 108), it is clearly only the infantry that he has in mind. What stands out, however, is that it was not so much the German use of gas, effective though this was against troops quite unprepared to encounter it, as their preponderance in artillery and ammunition which enabled them to drive us in April and May, 1915, out of the positions their infantry had signally failed to wrest from us by weight of numbers in October and November, 1914.

The main features of the munitions question are that ammunition was even more the trouble than guns (p. 55), that the provision of fuzes was the main obstacle to the rapid production of shells, that the main difficulties lay in the organization of labour (p. 57), and the lack of skilled labour for the armament firms. The Trade Unions rules and regulations were a serious obstacle (p. 40), and though this was eventually overcome the delay was clearly responsible for the loss of many valuable lives. It is also clear that the War Office officials who had to grapple with the munitions question deserve far more credit than they have usually been given. The Ministry of Munitions did not do much more than develop the principles already adopted by the War Office and was much indebted

to its immediate precursor, the War Office Armaments Output Committee (*cf.* p. 48). Its own contributions to the supply of shells and other munitions did not begin to reach the front till 1916, and the gross unfairness of the attacks made upon Lord Kitchener and the Master General of the Ordnance and the War Office is manifest. General Edmonds appositely quotes (p. 49) the Russian who remarked of the trial of General Stessel: "We are trying not the defender of Port Arthur but the Russian people," and the first thing that has to be remembered is that the story of 1915 is simply that of the results of unpreparedness for war. The British forces in France had to make premature efforts under unfavourable circumstances: they had to attack with partly trained troops, inadequately supported and incompletely organized, they had to attempt things before they were ready and with the chances all against them because, as things stood, it was necessary that they should fall in with the plans of the predominant military partner in the Alliance, and should subordinate their own policy and interests to the plans of the French.

This in effect is the other clue to the story of Second Ypres. Sir John French, though himself anxious to withdraw from the untenable position created by the success of the first gas attack (p. 201, *cf.* p. 271), had to accommodate his wishes to those of General Foch. That the counter-attacks should have been discontinued sooner, since there was so little artillery or ammunition available for them and the Germans had had time to dig in, is now obvious: but it is also clear that the main reason for hanging on so long and for making attacks which, like that of the Lahore Division on the 26th of April (pp. 255 ff.), had the scantiest chance of success, was that the French were always promising to do far more than poor General Putz ever could accomplish (*cf.* p. 211) and that Sir John French was loyally carrying out his part even though the French performance fell so far short of what he had been led to expect. Ultimately (*cf.* p. 287) General Joffre stepped in and overrode General Foch, whose zeal for the offensive under all circumstances and at all costs—in this case mainly at the expense of the British—was as ill-timed and deleterious as it was the reverse in 1918 (*cf.* p. 271). Once the first counter-attacks by the Canadian reserves, by the 13th Brigade and by Geddes' detachment, had stopped the German advance (p. 207) and had patched up something of a line from the left of the Canadians to the Canal, the sooner it was decided to accept the situation—as Sir Douglas Haig in 1916 accepted the loss of ground on the Vimy Ridge by

Sir Henry Wilson's Fourth Corps (*cf.* p. 271)—the better. The French failed to do anything effective to recover the ground they had lost east of the Canal largely because they attached so much less importance to Ypres and the Salient than the British did. This was natural enough, but it was exceedingly unfortunate that the locality selected for the gas attack should have happened to be held by troops who were distinctly below the average of the French and that the reinforcements they sent up later on were also not of the best quality, mainly new formations and containing a large proportion of African troops. As has been said, "the French got us into the hole and left it to us to help them out."

On the use of gas there are two short but most illuminating notes at the end of Chapter IX, one containing the German account of the 22nd of April, the other discussing the use of poison gas and pointing out the dilemma in which German writers find themselves, torn between the desire to claim credit for their skill and resource in utilizing so effective a weapon and the wish to exculpate themselves for their breach of the Hague Convention. What is clear is that the use of gas was an experiment, there was no intention to follow it up with a really large force. On several occasions, the 8th of May for example, when three German corps attacked two British divisions (p. 310), and the 25th of May, when four divisions attacked four brigades, the Germans enjoyed great numerical superiority as well as preponderance in artillery and in the air and advantages of observation, but on the whole their Fourth Army never had the numbers at its disposal which could have secured a decision by sheer weight (p. 210). Originally the gas was to have been used on the XV Corps' front, S.E. of Ypres: there were actually cylinders dug in at Hill 60 (p. 169) and the smell noticed there on the 17th of April was probably due to them, not to gas shells which were first used there on the 20th of April. This front, however, proved unsuitable as regard the direction of the wind and the N.E. shoulder of the Salient was selected instead. As General Edmonds says, "The Germans could hardly select a better sector to attack." The line here was weak and indifferently held by French troops sandwiched in between the British and the Belgians, and even the comparatively short German advance on the 22nd of April enabled their guns to make the whole Salient practically untenable. It is interesting to notice that despite all precautions for secrecy the French had heard of the intention to use gas from a prisoner taken on the 14th of April (p. 163), and an even earlier warning had also been received. General Putz,

however, seems to have made light of the information, believing it to be a false scent, purposely intended to divert the Allies' attention and prevent the withdrawal of troops from the Ypres front. Accordingly, though the news was passed on to the British, little attention was paid to it. No confirmatory evidence of an intended attack in force could be obtained by air reconnaissance and the British officers had not yet fathomed the German mind sufficiently to credit them with readiness to break their deliberate promises (p. 164).

General Edmonds' narrative of Second Ypres, if a sad story, is a proud one. A five weeks' Inkeremann, fought out by the brigadiers and the regimental officers and men in face of every disadvantage—for without better air observation, a better system of signal communications and the help of such later devices as air photography the higher commanders could do singularly little to influence the course of the battle (p. 354)—it is full of gallant achievements and stirring episodes. Incidents like the great counter-attack of the 10th Brigade on April 25th, the day of the landing at Gallipoli, the fine advance of two battalions of the 151st (York and Durham) Brigade which checked the German advance from St. Julien on the 24th of April (p. 230), the determined stand by the 1st Hampshires and 3rd Royal Fusiliers at the angle of the Salient near Berlin Wood (p. 263) or the 8th Durham Light Infantry's stubborn defence near Gravenstafel (p. 251), will bear comparison with anything in the better known struggle for Ypres in 1914. "Second Ypres" is mainly associated in the public mind with the Canadian Division's real "baptism of fire," but without any belittling of that fine performance, to which a well-deserved tribute is paid (p. 252), General Edmonds brings out well what the other divisions did. The Canadians' achievements are certainly enhanced by the fact that they were "new to war," the first of the Empire's improvised formations to be seriously engaged, but the infantry of the Canadian Division were practically all out of the fighting line after the 25th of April, the fourth day of the battle; they were not called upon to endure the protracted ordeal of the other divisions of the Fifth Corps, the Twenty-Seventh and Twenty-Eighth, who were in the fighting for as many weeks as the Canadians were days. The Fourth Division again, who relieved the Canadian infantry, held the left of the British line against repeated attacks from the 26th of April onward. The casualty table on p. 356 affords the most convincing testimony to the relative parts played. The 5,500 Canadian casualties, mostly incurred in four days it is true, indicate a smaller share in the defence of Ypres than the 15,500 of the

Twenty-Eighth Division or the 10,800 of the Fourth, while the Fifth * and Twenty-Seventh Divisions lost respectively 8,000 and 7,200; and if the 5,000 casualties of the Fiftieth (Northumbrian T.F.) Division are rather lower, these were incurred by its infantry only. It is curious that of all these Divisions only the Fifth has had its history written, though few did as much fighting or have such a story as the Fourth, and it has been left for General Edmonds to bring out the fine work done by the Northumbrians, the first Territorial Division to be engaged in really hard fighting. What this infantry might have done with a proper provision of artillery and an adequate supply of shells one can easily imagine from the record of their indomitable defence and splendid counter-attacks when handicapped by every possible disadvantage.

Second Ypres gets close upon 200 pages, Neuve Chapelle barely half that, even including the story of the preliminary proposals for a Franco-British offensive, which had to be dropped because, as the Twenty-Ninth Division had been diverted to Gallipoli, Sir John French could not relieve the French in the Ypres salient (p. 72). The battle did not miss being a big success by much; even as it was, it undoubtedly raised the prestige of the B.E.F. with both friends and foes. Before Neuve Chapelle the French had expected very little from the British, judging apparently by their part in Joffre's abortive offensive of December, 1914, when one has the mountain in labour and as the result an attack by two battalions (*cf.* pp. 15 ff.), though the simultaneous French attacks in Flanders accomplished little enough. At the most they thought that the "New Armies" might hold part of the line on the defensive (*cf.* p. 73). After Neuve Chapelle their tone was altered and there was "a fresh note of confidence and a more cordial desire on the French side for cooperation" (p. 155). The Germans also clearly had something of a fright. The attack convinced them that the British must be taken seriously and they promptly set about increasing their garrisons opposite the British front and strengthening their defences, only too successfully as the 9th of May was to show. Obviously they realized that they had been running undue risks and that they had been lucky to arrest the British advance practically on the line of their first objective.

The reasons why more was not achieved stand out distinctly. The failure, already mentioned, to demolish the wire opposite the

* The Fifth's losses were mainly incurred in the fierce fighting round Hill 60 and in the 13th Brigade's spirited counter-attack on the 23rd of April (*cf.* pp. 205-7).

British left not only resulted in a disastrous check to the 2nd Middlesex but held up the whole 23rd Brigade and left the 25th, which had reached Neuve Chapelle, unsupported. Delays in the transmission of information (p. 102) led to the 24th Brigade being held back when, had it been thrown in at once, it would have had only two companies of the 11th Jäger in front of it. Similarly the loss of direction by the right battalion of the Gahrwal Brigade led to its making a lodgment in the German line separated from the rest of the brigade by a pocket of Germans whose stubborn resistance does them enormous credit. This caused the diversion of part of the Dehra Dun Brigade to the right and then delayed the advance of the rest against the Bois de Biez, which was not occupied by the German reserves till after nightfall. Too much stress was clearly laid on the necessity for a combined movement: everybody waited for the others to come up so that all might go forward together (p. 107), and thereby let slip the chances offered to immediate exploitation. The attempt to control the fight from behind broke down owing to the difficulty of transmitting information. At no time were the commanders in rear accurately informed of the situation in front (*cf.* p. 123) and the same difficulty hampered the artillery, causing them to waste no small proportion of their carefully hoarded ammunition on wrong targets. Mist further increased the difficulties of registration, the German second line strong points at Mauquissart and Layes bridge and elsewhere were never accurately registered and escaped shelling, with fatal results (p. 138). Really, once the German reinforcements had arrived and they had manned and consolidated their second line, there was little chance of achieving anything more, unless by an immediate following-up of the repulse of the German counter-attacks on the morning of the 12th of March. General Edmonds shows that the problem should have been approached rather as one in siege warfare than in open warfare (p. 152): the Germans at Second Ypres and elsewhere showed that they had appreciated this more accurately and their tactics, a short advance after a careful artillery preparation to a definite line selected beforehand, were better adapted to the situation (pp. 210 ff.). That these tactics required far more guns and much more ammunition than the British ever had at their disposal in 1915 must be admitted, and the British authorities were naturally reluctant to resign themselves to the virtual inactivity inevitable on accepting this view of the situation. Actually we achieved complete tactical surprise at Neuve Chapelle (p. 86) and all subsequent attacks were based upon and developed from the

methods then adopted by the First Army (p. 84), just as the strategical basis of the 1915 plans—the attack on the enemy's railway communications—was in all essentials that of the plans which brought victory in 1918 (p. 69), when the means of obtaining victory, lacking in 1915, were available in profusion. It all comes back to the old story of unreadiness and the consequent inadequate facilities and supplies. The wire opposite the British left was not cut because the two Siege Batteries detailed to shell it had arrived from England too late either to register properly or to construct gun-platforms (p. 92), while the table (p. 85) of the ammunition available for the First Army is sufficient evidence of the difference between a 1915 bombardment and those of later years. The material means were lacking and men had therefore to be sacrificed. To have refrained entirely from any offensives in 1915 may now seem to have been the best course for the B.E.F., but what would the French have said and what would have been its effect on the troops? Neuve Chapelle certainly encouraged the British troops enormously and was an important step in "the gradual establishment of moral superiority over the enemy" (p. 153): inaction, coupled with the wear and tear of trench warfare, could only have been depressing, and it may well be argued that just as Sir John French's repeated efforts to take the offensive at Ypres in 1914 helped to impose on his opponents, so the British offensives of 1915 served to confirm the enemy in his determination to maintain a defensive in the West and to concentrate his resources against Russia, the blunder which went further than anything else to bring about the final defeat of the Central Powers. Had they massed their reserves behind the gas-clouds at Ypres or had they hurled at Verdun in 1915 the forces which they concentrated there in 1916, who can say how they could have been stopped? The B.E.F. was certainly in no position in 1915 to afford the French assistance by taking over substantial stretches of the line, still less to undertake and maintain an offensive on the scale of the Somme.

A VETERAN OF THE AMERICAN CIVIL WAR

(With Map)

BY SIR CHARLES PIERS, BART.

GEORGE M. MURDOCH, a gold miner of the Cariboo District of British Columbia, aged 89, and a grand old relic of the past, served with the Northern Forces in the American Civil War. A Scotsman by birth, he came early to Canada, but, attracted by the prosperity of the United States, went south to New Orleans in the early 'Fifties. There he worked for a cotton brokerage firm as a supercargo on one of their Mississippi River steamers, thus obtaining an invaluable knowledge of the river and country which was afterwards of great use to him. Although a lover of the South and the Southerner, Murdoch disliked slavery, and considered the breaking of the Union as disastrous, so his sympathies on the outbreak of war in 1861 were with the North. Besides, he had formed a friendship with William T. Sherman, a retired captain of the U.S.A. Army, then governor of the Louisiana Military College at Baton Rouge on the Mississippi, who was afterwards known to fame as General Sherman of the Northern Army. Sherman undoubtedly influenced Murdoch in his decision to join the North, which Murdoch did on hearing that Sherman had resigned his appointment, and, although offered a commission by the Louisiana authorities, had gone north to offer his services to the Federal Government. Sherman warned the Government that the 75,000 three-months volunteers called for by the President would be insufficient to subdue the Southerners, who meant fighting, although the Northerners would not believe it. He told them that it would require at least 300,000 men enlisted for three years, for which advice he was regarded as crazy, but which in the event proved correct.

George Murdoch enlisted at Springfield (Ohio) in the 1st Ohio Infantry, a zouave regiment of the State Militia. The men were armed with long Springfield muzzle-loaders, with triangular bayonets, which fired a curious paper cartridge of black powder, a round

bullet and three buck-shot. These muskets had a range of about 300 yards and were cumbersome and heavy. The regiment as a whole was not well drilled, as only ten drills in the year were compulsory. "F" Company, to which Murdoch was posted, was an exception, as it had been handled by an old British sergeant, and had a captain who was particularly keen. The men were a picked lot, so the average was far superior to the general run of the volunteers of the new armies of the North, to which too many scallywags had been attracted by the easily earned pay of \$14 a month and good rations. These men, and unfortunately many better, looked upon the whole business as a huge picnic. The regimental officers below the rank of major were elected by the men subject to the approval of the State authorities to which the regiment belonged and to whom they looked to for promotion. Senior officers were appointed by the Federal Government, so this dual control of units made proper discipline most difficult to maintain by those in command, who were also hampered by the fact that the various States provided the equipment of the units raised within their borders, and had to be looked to for renewals, a condition of affairs not conducive to military efficiency.

After a short period of so-called training the 1st Ohio with the rest of Schenck's Brigade was sent hurriedly to Washington to guard against incursions from the South by the Rebels. There it remained while the army, which the Northern patriots said would walk over the South, was concentrating. This opinion was not shared by competent military officers, who regarded the gathering volunteer army with apprehension and distrust. The folly of the three months' system of enlistment was evident on the eve of the advance into Virginia for by that time most of the men were time-expired. Many were mustered out, leaving their regiments below strength; while those that remained only did so, as they said, to see the fun through. With this spirit of school-treat fun pervading the junior ranks, the Northern Army marched from Washington on the 18th of July. The plan of campaign, in which the President, the Commander-in-Chief, and the Army Commander had collaborated, was most carefully thought out, and all were confident of success. Of the First Battle of Bull Run, it has been stated that never was a plan for a battle better thought out, and never was a battle worse fought than by the North.

Schenck's brigade was in the centre division under General Tyler. It was known that the Rebels had occupied a strong position on the heights west of, and overlooking, the stream of Bull Run, the

fords of which had been fortified. A scouting party of Rebels was at Centreville, a village some miles to their front, in order to keep a watch on the movements of the Northern troops. The Northern Army under General McDowell, about 28,000 strong, moved in three columns, of which the centre, General Tyler's, claims our attention. Tyler marched cautiously on Centreville, being unaware of the strength of the Rebels in occupation, who retired before he gained his objective. This led him into a false position, for, pressing on a few miles, he uncovered the Rebel position at Bull Run and, not being in sufficient strength, suffered somewhat severely before he could extricate himself and retire to Centreville. Besides, his troops were not in a condition to fight. Their discipline was shocking, they were raw and untrained, and, further, had been highly tried by their march from Washington in sultry weather along mud roads in clouds of suffocating dust. For men in their condition they were overloaded with ten days' rations, their blankets carried *en banderole*, and one hundred rounds of ammunition. Straggling on the march was prevalent, and the officers had little control over the men to enforce march discipline.

The division bivouacked in the fields round Centreville, and when reveillé sounded at 2 a.m. on the 21st of July, marched to attack the Rebel position at Bull Run. The Army was followed by numerous civilians in all kinds of vehicles, who had come from Washington to see the battle. Amongst them Murdoch saw William Russell, the *Times* correspondent of Crimean fame, dressed in a black frock coat, white waistcoat, and a tall chimney hat. Most of the men wore the same incongruous costume; while the women had turned out in all their Sunday best as if going to some festival. Although a nuisance to the military authorities, these civilians proved a blessing to those of the wounded who could get back from the firing line, as they transported them to where they could get their wounds dressed, the arrangements for dealing with the wounded at the beginning of the war being very crude. The delay caused by Tyler's abortive attack on the 18th and the necessary change in McDowell's plans proved disastrous to the North, as it enabled the Confederate General Johnston at Winchester to slip away from the right column of Northerners under General Patterson and join hands with the main Rebel army at Bull Run on the 21st, giving the Rebels a superior strength, and so turning the scale against the North.

About 6 a.m. Tyler opened fire with a battery on the Rebels holding the stone bridge over Bull Run. The bridge and fords

were reported to be heavily defended by wooden abattis. Tyler's orders were to attack the bridge, but he considered it too strong, so, moving higher up the stream, he crossed and turned the Rebel position at the bridge, driving them across the intervening valley and up the heights beyond. The bridge being cleared of the enemy, it was necessary to destroy the abattis before it could be used. It was under fire from the Confederate batteries on the heights and was a mark for the Rebel sharpshooters who still skulked in the woods on the far side. A covering party was necessary for the Engineers, so, as Shenck's brigade was in reserve, it was ordered to send one hundred men to the officer in command of the working party at the bridge. The 1st Ohio Regiment, being the best drilled and disciplined unit of the brigade, was ordered to find the covering party. Each company supplied ten men under a corporal, and Murdoch was selected by his captain and given the necessary acting rank. He did not want to leave the regiment, but, as he was allowed to take the men of his section, he accepted the situation like a soldier. When they got to the bridge they found it under a desultory fire from the Rebel guns, and shells were bursting in close proximity. When the covering party were posted, the Engineers under their major commenced the work of demolition. Immediately the guns on the heights concentrated on the bridge, but the sappers, who were Regulars, stuck to their work, and their major fearlessly standing up warned them of any better-directed shell. Luckily the shooting was not good, and the covering party kept the fire of the Rebel sharpshooters under, so it was most unfortunate when a lucky shot killed the plucky major, as both his men and the covering party got off very lightly. When the demolition was accomplished, the covering party returned to where it had left the regiment, but found that both brigade and regiment had moved. No one knew where they had gone; and so great was the subsequent confusion that it was not until the 25th that the men were able to rejoin their regiment after they had got back to Arlington Heights outside Washington.

At this period of the battle everything seemed to promise well for the North, so as the covering party could get no orders, it crossed the Bull Run and attached itself to a column of the 69th New York Regiment which was ascending the hills, here about 300 to 400 feet in height. About this time Murdoch and his section, who, in the scramble through the thick brush, had got separated from the column, saw General Tyler commanding the division. He considered that as the General was there he must be all right, and he

followed on in the track of the 69th Regiment. The way led up through a field of standing maize to a high fence bordering the plateau on which the Rebels held an advanced position. Into this the preceding column had forced itself, driving the 1st and 2nd Carolina Regiments like sheep up on to the plateau. Murdoch followed, and the Rebels seemed to be so on the run that the impression prevailed that the Federals could have gone right through to Richmond had they not been ordered back. It was exultantly bandied about amongst the attackers that the Rebels were already burning their stores at Manassas Junction preparatory to retreat. The sun was desperately hot, and the men suffered more from the sultry heat than from the enemy as they pressed on after them.

The turning point in this part of the field seems to have come when Rickett's battery of Northern guns ascending the heights was caught by a heavy flank fire from some woods which had not been cleared, and practically destroyed, though a charge upon the guns made by Wade Hampton's Rebel Cavalry was easily repulsed by parties and stragglers from different regiments with which Murdoch's section found itself. At the moment of the charge, Murdoch was about to climb a wooden fence, and was in the act of reloading his musket when the Rebel Cavalry suddenly swept down upon them. The charge was such a surprise that Murdoch found the Rebel Major leading the charge on top of him before he could reload. He dropped his musket, and, luckily, owing to the Rebel fumbling with his sword, had time to draw a revolver, a present before he left Springfield, and shoot his opponent through the arm. The major fell off, but got away in the confusion of the fight, in which the Rebels lost about forty men. Murdoch, however, captured his horse, and took it back with him to Washington, together with six Rebel prisoners of the Louisiana Tigers and 2nd Georgia Regiment who were captured on the plateau. His section, which so far had only lost one man, killed at the bridge, now had one of its best men shot through the lungs, and, as they were attending to him, an order to retire was passed along. Placing the wounded man on the horse, and putting the prisoners, who seemed quite content to come along, in the centre of the section, they followed the ruck back across the Bull Run. There, by a lucky coincidence, they ran into the wounded man's father driving a gig, so were able to hand him over to his care. The poor fellow, however, they subsequently heard, died the following day. They could not make out why they had to retire, but learnt later that Johnston's arrival had so restored the Confederate battle front that the Federal troops were repulsed all along

the line and had nothing to do but retreat. From the private soldier's view the situation did not seem disastrous, as after the first confusion of the retreat down the heights Murdoch's little party had no difficulty in making their way back to Washington, and only once saw a few Confederate cavalry, who made off before they could fire at them. The weather, however, was awful, and drenching thunderstorms turned the roads into beds of thick red clay, and their exhaustion was added to by want of rations, as well as the absence of great coats in the torrential storms. The first officer Murdoch met on Arlington Heights was Colonel Sherman, now in command of a brigade. Sherman asked him what he could do for him, but all Murdoch wanted was rations for his men and to know how to dispose of his prisoners. Sherman told him where to take the prisoners, and then, pointing to a shed, bade him help himself. When Murdoch had handed over his prisoners, he went to the shed which he found unguarded. Inside were piles of fodder, beans, flour, hard-tack, and boiled bacon. His men helped themselves liberally and then passed the night in a deserted house. On the following day they rejoined their regiment, and a few days afterwards, Murdoch and five of his section were told they had been selected for commissions, evidently owing to Colonel Sherman's recommendation. Murdoch himself was ordered to proceed to Springfield to join, as a lieutenant, the 16th Ohio Field Battery which was forming there. This six-gun battery was being raised, armed, and equipped by the State of Ohio. It was composed of three sections, two armed with bronze Napoleon rifled muzzle-loading 16-pdr. field guns and the centre section with smooth-bore howitzers made in Cincinnati. The strength of the battery was 175 of all ranks and was mustered at the Springfield Arsenal. The *personnel* was enlisted for three years under the call from Washington for 300,000 three-year men, and the officers received commissions ranking according to the number of recruits they procured, showing how soon Sherman's prediction had come true. The North was so hard pressed for men that as units were raised they were pressed into service, so the battery directly it was mustered was sent to Jefferson City in Missouri, and quartered in the arsenal, which was under the command of Captain Grainger, an efficient regular artillery officer. Under his able instruction the 16th Battery won the competition between the State batteries for six Whitworth breach-loading 16-pdr. guns presented by Mrs. Freemont, the wife of an ardent patriot. These guns, however, proved failures in action, as, owing to a defect in the system of rifling, the flight of the shell was so erratic that it was

dangerous to fire over infantry, so in January, 1862, when the battery was ordered to join the Army of the South-West, it was rearmed with 16-pdr. Napoleon guns, and later with 18-pdr. Hotchkiss breach-loaders.

During the spring and summer of 1862 the battery was engaged with the expeditionary force under General Frederick Steel in driving the Rebels out of Missouri, and marched through that state and Arkansas to Helena on the Mississippi. Here, during the autumn and winter, it was employed on river steamers clearing the Mississippi of Confederate craft. Later it served in the expeditions which attempted unsuccessfully to get on to the high ground behind Vicksburg.

In the spring of 1863 the battery returned to its old quarters at Helena, where General Ulysses Grant, having assumed command, was reorganising the Army of the South-West for the coming campaign against Vicksburg. Murdoch, who was now a hardened soldier, looked forward to the coming campaign with pleasure. He knew the country on the Confederate side of the Mississippi well. He had proved his worth with the battery, and, besides commanding a section, had been appointed quartermaster. He knew General Grant personally, and his friend General Sherman was commanding the 15th Corps in the Army of the South-West. The campaign, if successful, would be effective in crushing the rebellion; for if Grant could take Vicksburg, the great Confederate fortress commanding the Mississippi, he would divide the Confederacy, and then the Eastern and Western Rebel forces could be dealt with in detail. Murdoch, by his soldierly conduct and attention to duty, had become well known to his superiors and was often chosen for special duties in which his courage, coolness, and knowledge of the country stood him in good stead.

The main difficulty was to get at Vicksburg, where the only high ground suitable for operations was on the far side of the Mississippi, all the rest was low and terribly swampy. All previous attempts had failed, so Grant was not a *persona grata* with the Northern politicians, who could not realize his difficulties. They were tired of the war, and did not even hesitate to demand his recall from the President. But Lincoln, in his wisdom, merely remarked that he rather liked the man, and would try him a little longer. The plan that Grant proposed was not received with favour by even Sherman, his most trusted lieutenant, and the other generals frankly opposed it. But Grant stuck to his plan to cross the Mississippi below Vicksburg, and then strike at the rear of the fortress. When his

generals asked him what he proposed to do, when he had crossed the river, if he was defeated, Grant replied quietly that he would probably be swallowed up, but he added decisively: "I do not propose to be defeated." The Confederates across the river were in far superior numbers, but the very audacity of his plan, and the speed with which he moved carried Grant through to success.

The spectacular part of the campaign was the passage of the fortress by the gunboats and small river steamers, which were piled high with trusses of hay, bales of cotton, and bags of grain to protect them from the fire of the Confederate batteries. The passage was successfully made at night by the light of a fitful moon and the blaze from the fourteen miles of hostile batteries crowning the heights. The vessels followed one another in single file with their double funnels belching smoke and sparks, and, strange to say, got through almost undamaged. Meanwhile on land the army marched down out of sight of the fortress to the chosen place of embarkation. There, with the men hanging on to them like flies, with the guns and caissons dismounted, they rapidly ferried the army across. The march down had been a trying one, so when Grant crossed to Bruinsburg on the 30th of April, he had only 20,000 men at the front. He had been obliged to leave the 16th Corps to guard his base at Memphis, and until half-way through the campaign never had much more than 33,000 men across the Mississippi. General Pemberton commanding the Confederates had 50,000 in Vicksburg, and as many more round Jackson, the State capital. Grant moved rapidly and, after capturing Grand Gulf, which gave him another port of disembarkation, he struck at Jackson, which the Rebels after a feeble resistance abandoned and marched off north in the attempt to join hands with the force marching from Vicksburg. Grant, through an intercepted despatch, became aware of this move, and so fell back towards Vicksburg and the Mississippi in order to guard his line of communications. The Federal Corps were scattered, and, as he scented a pending battle, Grant took over command himself at the front and concentrated his corps to prevent General Pemberton from Vicksburg joining forces with the Confederates from Jackson.

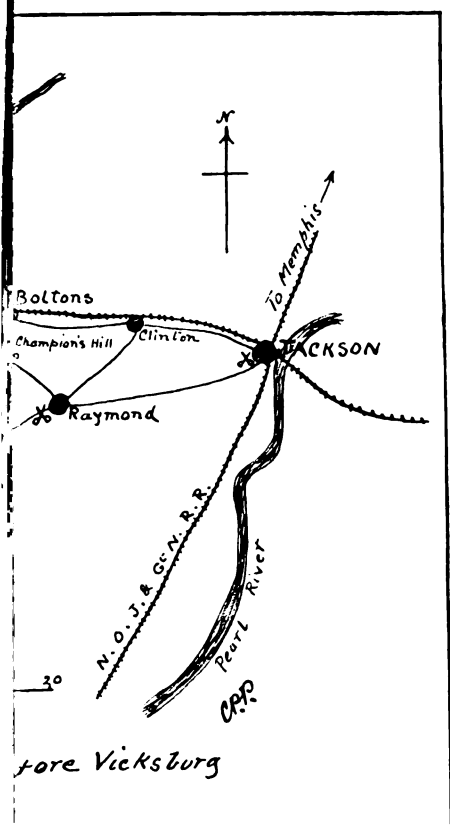
On the 16th of May the opposing armies met at Champion's Hill. Numbers were about equal, but Grant by fine tactical dispositions seized the advantage at the beginning of the fight and succeeded in turning the Confederate flank and in driving them off the field in a hurried retreat. At first the battle was evenly contested, and Grant's offensive could make little headway against the Rebel

defence of Champion's Hill, the key to the position. McPherson's Corps, to which Murdoch's battery belonged, was ordered to attack the wooded hill, which, rising abruptly from the surrounding cotton fields, dominated the position. The Federal infantry forced their way to the foot of the hill, but there the heavy fire from the woods above brought the attack to a halt, and the Confederates' fierce counter-attacks threatened to drive them off the hill. The situation in this part of the field appeared so serious that Murdoch, as a desperate resort, was ordered to take the two guns of his section up into the firing line, and attempt with case-shot fired point blank at the enemy to clear the way for a further advance. He got his guns to the foot of the hill without loss, and, leaving the ammunition caissons under cover, rushed them up to the straggling line of infantry, lying on the ground firing up at the woods from which a hail of bullets descended. The harassed infantry raised a feeble cheer as the guns came into action in a shallow hollow which afforded some protection to the gunners, as most of the shells and bullets just skimmed over their heads, but how Murdoch, who remained mounted, escaped was a marvel; he had two horses killed under him during the fight without receiving a scratch. Ammunition for the guns was manhandled from the caissons, and it was here that most of the losses occurred, and when, with the famous "Rebel Yell," the enemy, time after time, made desperate charges right up to the muzzles of the guns, only to be repulsed by the blasts of case. These constant attacks were so threatening that a rumour got back that Murdoch's guns were captured, so his captain came up into the firing line to report on the situation. He had hardly reached the guns, however, before he was mortally wounded. At last the fire of the guns began to tell, and the Rebel charges became fewer and more feeble. The guns were nearly red hot but, despite this fact and the severe losses in *personnel*, Murdoch fought them until they were so damaged as to be practically useless. By this time luckily Grant's turning movement began to take effect. The fire from the woods decreased in volume, and the remains of the 56th Ohio Infantry being reinforced sprang to their feet, and, headed by Murdoch and his few gunners, swept up the hill into the woods. There they overran a battery of howitzers and field guns. The guns Murdoch spiked, and the howitzers were rammed tight to the muzzles with earth to make them useless. The Rebels attempted to retake the battery but were easily repulsed, and after this last charge hastily retired from the hill. Grant was quick in following up the disorderly retreat of the Rebels on the Big Black River, where

they made their last stand before being driven inside the lines of Vicksburg. By the 18th of May Grant's plan of getting behind Vicksburg had succeeded. Time was still a great factor, so he determined to risk a general assault, but failed with heavy loss, and it was not until a second attempt had also failed that he realized regular siege operations would be necessary to reduce the fortress. These were immediately undertaken, the ground gained in the abortive assault being used for the works of investment. Murdoch, now in command of his battery, reduced in guns and *personnel* by the losses at Champion's Hill, was ordered to take up a position by night, with his four remaining guns, on a knoll about 300 yards from the Confederate defences. Under cover of darkness, protection for men and guns was built up with compressed bales of cotton brought up on mules, and this rude parapet was strongly reinforced with earth, until the whole made quite a strong little fort quite able to resist anything but the larger Rebel guns. When morning broke, Murdoch found that his position commanded quite a view of the Confederate lines, and, in his immediate front, he could see right into them. This position he held for about three weeks, until the surrender of the fortress, making his gunfire so obnoxious to the defenders that they did their best to knock him out, but without success. On one occasion his "look-out" spotted a big 32-pdr. Parrot gun being brought up to do the trick, and, although fire was immediately opened upon it, the Rebels managed to get it undamaged into the gun emplacement. Luckily, however, before it could be fired, a shell from one of Murdoch's 18-pdr. guns entered the embrasure, and bursting full on the lip of the muzzle, burst the gun and killed thirteen of the gun crew. This information Murdoch got from the Rebel battery commander after the surrender, who, on the 4th of July, came over to Murdoch's fort to see for himself, as he pithily put it, "what sort of fighting cuss" he had been up against. After Murdoch had fed him, for the Rebel troops were on half rations, and the civilian population practically starving when they surrendered, he complimented Murdoch on the excellent shooting of his battery, saying, that if all the Yankee guns had killed as many Confederates as Murdoch's battery, there would not be enough men left in the South to breed from.

After the fall of Vicksburg the Army of the South-West was broken up. Grant went to command the Army of the Appomatox in Virginia, and Sherman was preparing for his famous march through Georgia to the sea. Murdoch's battery, though much reduced in numbers, would willingly have gone with Sherman, but

was ordered north to St. Louis to refit and recruit up to strength. There Murdoch got leave to go to Canada to see his parents, whom he had not seen for eight years. When at home his mother made him promise that he would not return to the war. So, in the fall of 1863, he was mustered out of the Northern Service, and he sailed from New York round the Horn to join a friend in British Columbia.



[To face p. 154.]

A SLIDING SCALE FOR CALCULATING MARCH STARTING TIMES *

BY BRIGADIER-GENERAL J. E. EDMONDS, C.B., C.M.G., R.E.
(retired)

IN calculating march tables the so-called "graphic" adopted from the railway service, takes a considerable time to draw. It requires a large sheet of squared paper, at least a ruler or dividers, or a parallel ruler, for its construction. When completed it is difficult to amend if changes of route, order of march, or time become necessary, and in any case it is cumbersome and lacks flexibility.

All the information that a "graphic" gives can be obtained, in very much less time than it takes to draw one, by the use of three scales drawn on the edge of three separate strips of paper :

- (a) Time Scale (Fig. 1).
- (b) Diagram to scale of the column in order of march (Troop Scale) (Fig. 2).
- (c) Route of column, taken from map, but drawn as a straight line (Route Scale) (Fig. 3).

For calculating "starting times" the first two only are required.

While the size of the paper which must be employed practically limits the scale of miles that can be used on a "graphic" to $\frac{1}{2}$ -inch to the mile, the above three scales can, without using paper larger than half a sheet of foolscap, be drawn 1 inch or 2 inches to the mile. The results are therefore more accurate.

If any change or modification takes place in the rate of marching, or in the route, or in the order of march, only one simple scale has to be redrawn.

Time Scale (see Fig. 1).—This is constructed on any scale desired by first dividing it into 1,000-yard lengths, but figuring it according to the time taken to traverse a thousand yards. Thus at the ordinary infantry pace, 100 yards a minute, the sub-divisions will become "10-minute" intervals (see diagram). The hourly halts are allowed

* This method was used in the 4th Division before the war, but has never been described in print.

for by omitting the times passed in rest. Thus, if there is a ten-minutes' halt before 11 a.m. the scale is figured 10.50-11 a.m. at the same sub-division ; similarly, the time spent in any additional halts or delays, which may occur during a march, can be struck out simply by altering the figuring of the scale.

Time scales can, of course, be made at leisure and kept ready for use.

Troop Scale (see Fig. 2).—To construct this, prepare a piece of card with the lengths of road space taken up by various units marked on it according to scale in use. This card also can, of course, be kept ready. If the lengths are marked on its four sides, it need not be larger than a playing card. When the order of march has been settled on, with the unit card set out the column graphically on the edge of a sheet of paper as in Fig. 2.

Route Scale (see Fig. 3).—This is made, on the selected scale, by laying out the map route, however winding it may be, as a straight line, and marking any locations the route passes through, road turnings, etc., on it.

Starting Times.—To obtain the starting time of the various units *with one starting point*, take the time and troop scales, place the head of the column opposite the starting time ; the starting times of the various units can then be read off by observing the figures on the time scale opposite the head of each. *E.g.*, suppose, as in Fig. 4, the starting time of the head of the column "A" group is 8.30, then "B" group starts at 9.25 ; "C" at 10.20 ; the Brigade Ammunition Columns at 11.18, etc.

If *several starting places* are to be used for different groups of the column, note first the time that "B" group should start if it used "A" group starting point, viz. 9.25 a.m. Then (see Fig. 5) place the time scale against the route scale so that 9.25 a.m. is opposite "A" group starting point and read off the time opposite "B" starting point, 8.36. Now take the time scale and troop scale (see Fig. 6), and, placing 8.36 a.m. opposite the head of "B" group, read off the starting times which will be found opposite the head of each unit. Thus Field Company, 9.16 ; XXXII Brigade R.F.A., 9.18 ; 12 Field Ambulance, 9.32. It would not be accurate to make the correction by deducting 39 minutes, the time required to traverse the distance between the two starting points, from all the times referred to "A" starting point, because this would not take the hourly halts into account.

Similarly, Figs. 7 and 8 show how "C" group is dealt with if it used "C" and not "A" starting point. The time it should

Univ. of
California

140 June page 150.

Univ. of
California

120 June 1901

NOTES ON FOREIGN WAR BOOKS

TACTICS AND STRATEGY

Die Vorbereitung des deutschen Heeres für die Grosse Schlacht in Frankreich im Frühjahr 1918. I. Grundsätze für die Führung ("The preparation of the German Army for the Great Battle in France in the spring of 1918. I. Principles on which it was conducted"), by Colonel Joachim (Berlin, Mittler, 7 marks), is of extraordinary interest and deserves translation. It is a collection and summary of a great number of tactical instructions drawn up before the battle by various commanders from the Supreme Command down to divisional generals. As there would be much repetition, the instructions are not all given in full, but the general sense and the differences of opinion that existed right up to the end are brought out. We are thus offered a clear insight into the German military mind of 1918. German-like, the book is said to have been compiled in order that the tactical experiences of the war may not be lost, and the soldiers of the post-war period may have the advantage of them and may understand the new training manuals the better. But of one thing we may be certain : that the successful tactics of the next war will be something quite different, and that the Ludendorff principles which led to Germany's defeat in the field in 1918 will do so again if followed in another war. We may perhaps learn from them the weakness of German theories and why tactics so carefully thought out on paper failed in practice.

The book begins with a defence of the decision to attack in 1918. Only attack brings about a decision in war, we are told. Germany had been "brought near to certain collapse (*sicheren Untergang*) by the Somme battle in 1916 and the Flanders battles in 1917." She dare not wait to stand such another attack however many carefully prepared back positions were built. There was no choice but attack. And it had to be carried out in the short time between the return of troops freed by the Russian collapse and the arrival of the Americans in force :

"Time was against us, also as regards the internal condition of the Central Empires, which urgently demanded a rapid end of the war.

England was the soul of the war—all depended on her attitude." She would have to be defeated before America became effective, "then Italy would give in, and France would be left isolated."

The German troops, now accustomed to trench warfare, or to easy successes against the Russians, had to be trained for attack, especially as most of the old regimental officers of 1914 had fallen. Every effort, therefore, was made to prescribe the correct tactical doctrine, and to this end, and with a view to avoiding the mistakes made by the Allies, much was written; and the cream of this wisdom is recorded in the following pages under the headings of:—

General principles, Surprise, Position of headquarters, Reserve of officers, Strength of formations, Width of fronts, Decisive points, Cooperation of artillery and infantry, Creeping barrage, Divisions of first and second waves, Distance between divisions of first and second waves, Relations of divisions of first and second line as regards command, Deployment of attacking troops, Issue of orders, Resumé, and Defence.

From the mass of theoretical wisdom provided, only extracts can be made here. Under General Principles, we are told:

"In spite of carefully thought out preparations and minute instructions, an attack cannot be made to roll on like a piece of mechanism, the leaders must lead and everybody must act for himself."

"Lord Haig's despatches dealing with the attacks of 1917 were found most valuable, because they showed how not to do it. . . . The British attacks failed because the Higher Command thought it its business to relieve the attacking divisions by divisions behind them fairly soon, instead of putting the latter in where the attack was going on well. Besides, the British infantry was trained to a strictly formal advance. The number of divisions employed corresponded to the number of objectives; each wave had a certain line as its objective, where it was to halt, whilst the next wave passed through it. . . . This crippled the *élan* of the troops, and prevented successes from being quickly and determinedly exploited. Further, the success of the infantry attacks was founded on the stiff and undirected creeping barrage, and the commanders did not grasp the proper moment to send up strong artillery with plenty of ammunition."

"The success of a break-through is not only a tactical and strategic question, but is also essentially one of reinforcement and supplies."

The choice of the front of attack, therefore, depended first on railways and secondly on roads.

"The tactical break-through is not an object in itself; it provides rather the means to apply the strongest form of attack, envelopment."

An attack with limited objectives is only for the stronger side, and even then it means months of preparations and an extraordinary expenditure of power.

Close country may favour an attacker by providing possibilities of

surprise, and giving cover from view against artillery ; but it prevents rapid progress, militates against the influence of leaders, and allows shirkers to lag behind unseen.

The least objective of the first day must be the enemy's artillery ; the objectives of the second day depend on what is achieved on the first, but there must be no rigid adherence to plans made beforehand.

As regards touch, infantry that in the attack looks to the left or right soon comes to a stop. Touch with the enemy is the thing. A uniform advance in line must in no case be demanded. The fastest, not the slowest, must set the pace, and no time must be given to the enemy to surround any troops who have pressed on into his position ahead of their fellows. It is admitted that a crafty enemy might set a trap by, say, withdrawing his centre, leaving strong wings.

The success of an attack depends not so much on the careful grouping and engaging of the troops, and procedure according to plan, as on the leaders taking advantage of the situations that arise. "The British believed in the decisive effect of their artfully arranged creeping barrage, expecting it would carry the attack forward without effort on the part of the infantry. [Cf. the German programme for the Verdun attack.] The influence of the regimental and still more that of the higher leaders was eliminated. Thus it came about that the important initial tactical results on the Somme, at Arras, at Messines, in Flanders and at Cambrai, were not realized and not made use of. Much depends on the self-reliance and skill of the regimental officers and commanders [German O.C. regiment is the equivalent of a British brigade commander]. The higher commanders can only influence a battle by the proper employment of reserves."

"Next to thorough training the trust of the men in their leaders is all-important."

"Striving after surprise must not lead to insufficient fire preparation." Not only must the point of attack be kept secret from the enemy, but he must be led to expect attacks elsewhere. The advantages of concealment were taught by means of the cinema.

The place of the leaders, including those of armies and corps, is on the battlefield ; the divisional commanders well to the front. From corps commanders downwards they must be able to follow the battle with their own eyes, besides having liaison officers with subordinate commands.

There must be a reserve of officers for every unit, which generally should stay with the brigade reserve.

A corps should, as a rule, not contain more than three divisions, at most three in front line and three in second. An army should not consist of more than three or four corps.

The average front of an attacking division should be about 2,000 metres, but will depend on the ground. Boundaries must be indicated by actual visible reference marks, not lines on maps.

Every formation and unit must be given a definite "centre of gravity"—which seems to mean a definite key point that it must secure. "Woods, strong points, villages and unfavourable ground for attack must be avoided, and neutralized or smashed by fire. They can usually be dealt

with by envelopment." The concentration of troops on their key point must not lead to bunching.

As regards cooperation of artillery and infantry :—

" The inclination of infantry to press on too far must be counteracted at training. The advance of the infantry must be organized in the most complete agreement with that of the artillery. . . . The great difficulties of the infantry attack only begin when it leaves the fire-protection of the artillery behind. On the other hand, the infantry must be warned against too great dependence on the creeping barrage, to which it is inclined. This barrage must be worked out by a rigid programme, but altered as necessary by using light signals."

There must be no thought of relieving the divisions of the first line every day, or of assigning them a day-objective. With good leading, they should go ahead for several days. But the second line divisions must be prepared to push up if the attack seems coming to a standstill, and therefore must not be too far behind—3 to 4 kilometres is suggested. When they do come up as reinforcements, they will be under command of the generals of the first line, and similarly guns sent up will take the orders of the divisional artillery generals already on the ground, in order to avoid any change in the conduct of fire ; they are in fact to be treated as reserves.

Troops should be ready in position one hour before the beginning of the artillery bombardment ; how they are assembled will depend on the available trenches and cover. Organization in depth can be assumed as soon as the enemy's barrage zone is passed. The second line divisions should be 1 to 2 km. behind the first, and the third 15 km. behind the second.

Long " omnibus " orders are to be deprecated, particularly in open warfare. They take too long to write and also to read. Short orders to each subordinate should be sent by telephone or orderly officer, the written order can follow. On the other hand, nothing of importance must be omitted, and any chance of misunderstanding prevented by verbal or written explanations. Notwithstanding this, the independence and responsibility of the lower leaders must not be interfered with. On no account must they be disturbed by orders merely issued because a commander is perplexed or " jumpy." Usually information of an infantry fight is received by a higher leader too late to be acted on.

The final directions of the Supreme Command laid down that :

(1) At training the objectives had too often been indicated as first line, second line, intermediate line, artillery protection line ; the aim of the break-through should be the enemy's artillery, then all the other lines would fall.

(2) The reserves must be put in where the attack is progressing, not where it is held up.

(3) The inclination of leaders to assemble their troops and get them in hand after a certain objective has been reached must be suppressed. If the troops know the intentions of the commanders, they can go on of

themselves. Pulling out reserves again after a success is another question, and may be permitted if the situation allows of it.

(4) Continual scouting and patrolling ahead and on the flank against surprise must be kept up.

(5) Fire of rifle and machine gun at medium and long ranges is too much neglected.

(6) The importance of gas shell and smoke screens must be borne in mind ; the momentary effects of gas are far greater than that of H.E. shell ; whilst the less the artillery support is, the more smoke will help.

(7) It is little use sending up artillery unless there is ammunition to go with it. The infantry must first see what it can do for itself and not call for artillery directly it is held up.

General Groener, who was Deputy Chief of the Staff of the German Forces on the Russian frontier on the outbreak of war, and took up the duties of First Quartermaster-General in the last days of the war when Ludendorff was superseded, has written a strategic study of the opening phases of the war, entitled *Das Testament des Grafen Schlieffen* ("The last will and testament of Count Schlieffen"), Berlin, Mittler, 15s. In this he essays to work out on the basis of the principles laid down in Schlieffen's two books, "Wars in the Present Day," and "Cannae," how the Field-Marshal would have managed 1914. He also says a great deal about the often-quoted plan of Schlieffen for the invasion of France, devised in 1905, which Moltke is supposed to have watered down. But as the public has never been allowed to see more than extracts from this plan, the extravagant claims made for it still lack any substantial foundation, and we must accept hearsay evidence even for its existence. It seems absurd for any one who knows the German Army to place the blame for failure on Moltke : it lies on the Great General Staff—such high personages as Moltke had the work done for them. We know that both the German service of information and the German service of communication completely broke down in the war ; and so did German strategy. No doubt if the Great General Staff had had the perfect Intelligence and the means of collecting it and issuing orders that it enjoyed at manœuvres, it would have done the right thing—for manœuvres—but, faced with the realities of war, it failed.

General Groener insists that Schlieffen, though he did not in his plans provide for Russia being an enemy—a somewhat important factor—yet did include England. But his perspicuity does not seem to have been very great, for he took England into account only to the extent of leaving an observation corps and four *Landwehr* brigades in Schleswig-Holstein to deal with a landing, and, it is

admitted by the author, failed to allude to the action of the fleets. To leave out the British Fleet and Russian Army in a "receipt for victory" does not seem to show great foresight.

General Groener suggests that the following order should have been issued by the Supreme Command on the morning of the 21st of August, 1914—judging by the time taken by other messages, it could not have been received until evening, but he overlooks that point :—

"Both cavalry corps (under a single commander) will discover definitely where the British are, and, by the evening of the 22nd, will reach the area south of the Ath—Tournai road. Reconnaissance boundaries : right, Dunkirk—Calais—Boulogne ; left, Maubeuge—Hirson."

"First Army will reach the line Ligne—west of Ath—Soignies on the 22nd with three corps ; two corps in second line will push up behind the right flank as far as their marching powers allow.

"The Second Army will halt on the 21st and allow its rear portions to catch up. On the 22nd, it will begin a slight wheel to the south, left flank remaining at Gembloux and the right reaching Nivelles. The Army is to be arranged so that three corps are available for an advance of the right wing via Binche—Fontaine l'Évêque. One division will remain north of Namur to cover flank and rear of the Army. The 13th Reserve Division will be brought up to the area north-west of Huy.

"The Third Army will leave one division of the XI Corps as covering force against Namur, on the south-east of the fortress. The XIX Corps and XII Reserve Corps will temporarily be held somewhat back on the left flank, and will be placed so that as the operations develop the corps can cross the Meuse south of Givet and at Fumay, or can intervene in the battle of the Fourth Army, south-west of St. Hubert. The Supreme Command reserves its decision as to how these two corps shall be used.

"Local offensive movements are strictly forbidden. If the enemy crosses the Sambre to attack the Second Army, the latter will remain on the defensive, whilst the First Army continues its movements in the direction ordered. If the First Army is attacked at the same time, it will employ as few troops as possible on its front, and proceed to envelopment with a strong right wing. If the enemy, contrary to expectation, withdraws, he must be attacked at once on the whole front of the Armies, but only on the express order of the Supreme Command [which will take twenty-four hours or so to procure] when this has the certainty [how will this be obtained ?] that the movement is not merely a local retirement."

The other operation orders which General Groener puts up as "winners" for the decisive wing are equally grandmotherly, interfering in the province of the army commanders and even corps commanders. They could only be possible at a war game, where the exact position of every piece is available.

There is an interesting analysis of the irresolution displayed on the southern flank in Alsace and Lorraine. General Groener thinks

that the Supreme Command on the 14th of August ought to have issued the following order—which like others is one of a “*sergent de bataille*,” and goes into details that should have been left to the army commander :—

“ Sixth Army :

“ The III Bavarian Corps will retire at once via Courcelles and Kurzel behind the Nied. The 8th Cavalry Division will screen this movement, as well as the deployment behind the Nied.

“ The II Bavarian Corps, XXI Corps and the Cavalry Corps (Bavarian and 7th Cavalry Divisions) will have the task of holding back the enemy on a broad front, without becoming too deeply committed, and to draw him on as they retire. Direction for II Bavarian Corps, Saarlouis ; for the XXI Corps, Saarbrücken ; for the Cavalry Corps, Saargemünd.

“ The I Bavarian Corps is transferred from the Sixth Army [where ?]

“ The Bavarian Reserve Corps will march to the right behind the Nied to Busendorf.”

If the late Schlieffen had such thoughts and wrote such orders, it is a pity his “ plan ” was watered down.

General Groener’s treatment of the Eastern Front is even more extraordinary. We thought, judging from Colonel Foerster’s exposition of Schlieffen’s strategy, that one of Schlieffen’s great ideas was to make the striking (right) wing as strong as possible, and leave the other wing a mere screen, and let the French come into the Rhine provinces if they foolishly pressed on. Schlieffen made no plans for the Russian frontier, but we may imagine that here also he would have placed a minimum force. Not so his disciple. He is for an offensive campaign East and West at once. He supposes a complete victory over *Rennenkampf* at *Gumbinnen* (before *Tannenberg*) by envelopment of his right. [As *Mackensen’s* Corps in the centre ran away in panic, the German enveloping force would probably have been driven into the sea.]

To conclude, it is admitted that Schlieffen did not foresee a long-drawn-out war ; but then his reading ended at *Cannae*, he had not got as far even as the war of 1861–1865 by many centuries.

WESTERN FRONT

Those who cannot afford time to read the two volumes of the German official account of the Marne Campaign will find the German excuses for defeat stated compactly in a hundred-page pamphlet by the ex-German Crown Prince, published by the German Officers’ Union, *Der Marne-Feldzug*, 1914 (Berlin, Dob-Verlag, 2 marks). It has, no doubt, been compiled with a view of

putting the German case before a wider public than the very lengthy official work could command. As the volumes have been reviewed here,* it will only be necessary to extract some of the Prince's opinions and admissions. He is particular to state that the German plan failed to bring the complete and rapid victory that was expected, not because German strategy or system was wrong, but because of the mistakes and incompetence of certain persons. He distributes blame to all the army commanders except the Crown Prince Rupprecht and himself, but criticizes most severely the Chief of the General Staff, Moltke, and his emissary, Lieut.-Colonel Hentsch. He claims that the Kaiser did his best to prevent a retirement from the Marne. He has, however, to admit that his father made a bad choice when he nominated Moltke to succeed Schlieffen. He avers that Moltke did very well in time of peace, and that it was not until war came that he was found out.

There is a most interesting statement that in the Schlieffen plan—which has never been published in full—the advance of the left wing (Sixth and Seventh Armies) was contemplated, so that in combination with the great wheel of the right wing a super-Cannae would be brought about and the French surrounded in the open field. Moltke began the double envelopment at once; Schlieffen, according to the Prince, only put this forward as his ultimate objective, “the final act of the operations.” Crown Prince Rupprecht was opposed to the idea of breaking through the French fortress line, which he called “a difficult and unpleasant task which must be proceeded with most carefully.” The Supreme Command was responsible for the attempt, and in particular the artillery expert, Major Bauer, who believed that the fortifications could be crushed by the super-heavy howitzers. The allotment by the Supreme Command of 24 divisions to the left wing for the attack, when 12 would have sufficed to hold the front, was, in the Prince's opinion, Moltke's most unforgivable mistake.

The next greatest fault was the dividing in two of the Third Army to assist the Armies on its right and left. The Supreme Command should not have permitted it—and has no excuse, as it was in telephonic communication with the Third and Fourth Armies. Duke Albrecht of Württemberg (Fourth Army) should not have asked for assistance; and Hausen (Third Army) should not have afforded it. Had the Third Army gone straight on, as ordered, on the 28th of August, it would have found nothing in front of it, and would have been through the French front. Had it even gone as a

* Reviewed in the *Army Quarterly*, October, 1926, and April, 1927.

whole to the assistance of the Second Army, it would have been moving, at any rate, towards the strategic flank, and would probably have enabled Bülow to defeat Lanrezac's Army decisively at the battle of Guise.

The Supreme Command is also held to be a partner in Kluck's offences of deliberate disobedience of orders ; it ought to have insisted on being obeyed.

After the failure to obtain a decisive victory on the frontier, the Prince considers that Rupprecht's operations on the Meuse should have been stopped. The breaks in the railway communications in Belgium made it impossible to shift the Seventh Army to the right wing as at one time suggested, but the Sixth could have relieved the Fifth around Verdun. Then the last-named Army could have been moved to the right, together with the XI and Guard Reserve Corps, already out of the line—and eventually sent to Russia, although Ludendorff said he could do without them.

The Prince considers that Kluck offended both against the wording and sense of the Supreme Command orders in pushing on south-eastward past Paris. Although it would have been easy to have got him on the right path again, Moltke let the reins fall. Apparently the latter was misled by Bülow's report of the 3rd of September : " that the Second Army, close on the heels of the enemy, is pursuing up to the Marne, and that the enemy south of the Marne is falling back in complete disorder."

There is severe criticism of the Supreme Command order of the 5th of September, which directed Kluck and Bülow to face towards Paris, the Third Army to halt and await orders for its further course, whilst the Fourth and Fifth Armies proceeded with the original plan of driving the French eastward. Actually only the western half of the Fifth Army, which was jammed up against Verdun, could move. The Sixth and Seventh Armies were stopped and defeated at the French frontier fortifications. The decision of Kluck to take all his corps out of the line and use them to protect the western flank is praised ; the situation was so desperate that half measures would not suffice. The fact that Kluck made no provision for command in the gap that he left is ignored.

As regards differences in the statements of various officers as to whether Hentsch had " full powers," what his instructions were, and what happened at the various Army headquarters, the Prince suggests that each officer has given the matter the colouring that coincided with his views at the time. He inclines to the opinion that Hentsch carried out the instructions given him by Moltke in

the final interview, without witnesses, between these officers. One point the Prince is certainly entitled to make. When Hentsch gave him orders to retire, he asked for them in writing, and Hentsch did not press him further. Bülow and Kluck, whether actually ordered to retire or not, showed the greatest anxiety to be off, and certainly did not ask for a written order.

As regards Kluck's flank guard, it is mentioned that the IV Reserve Corps was down to the strength of a division ; but the fact is not referred to that the 4th Cavalry Division with it was of little use, having been shot to pieces and its guns captured by the British at Néry on the 1st of September. Possibly the accident that the flank guard had no aeroplanes and very little cavalry had more to do with Kluck's defeat and the consequent loss of the battle of the Marne than anything else.

Bülow (Second Army) is blamed for basing his action on the supposed critical position of the First Army when the Allied columns crossed the Marne, and for not realizing that Kluck could look after himself. Before retiring he should have found out definitely what the situation of the First Army was. The Prince thinks that Bülow's decision to retire would have been justified in a war-game, and that he failed to take into account the moral and fighting qualities of the two belligerents. The same criticism would apply to Ludendorff's decision to attack on the 21st of March, 1918, and much of the German action during the war.

It is claimed that Lieut.-Colonel Hentsch misled the staff of the First Army, and was "the victim of his own mental sluggishness," when he realized that the First Army was victorious. But the Prince does not explain why Kluck and his Chief of the Staff Kuhl, hitherto so strong-headed and disobedient, meekly obeyed a verbal order to retreat, and initiated the retrograde so speedily that it must have been already prepared for. It had, indeed, actually been begun two hours before, at about 1 p.m., the time of Hentsch's arrival at Kluck's headquarters. Bülow already knew of it. But such trifles the Prince overlooks.

He is also disposed to deal kindly with the disaster he organized in his own Army, late in the afternoon of the 9th, by ordering a night attack.

"I admit," says he, "that at the advanced hour of the day the preparations for the attack could not be so thoroughly worked out as was desirable, and that, in consequence, there were misunderstandings and want of exactness in its execution by the troops."

They indeed fired on, and attacked, each other.

Finally, the Prince claims that if Kluck had not been stopped the French Fifth Army and the B.E.F., together with the Sixth Army (though it was well covered by the guns of Paris and had a clear line of retreat into that fortress), would have been surrounded in a second Tannenberg; Joffre would have been compelled to retire behind the Seine, and the fall of Paris would have been only a matter of time.

The book concludes with disparaging remarks on the strategy of General Joffre and the assistance rendered by Sir John French.

In *Operative und taktische Aufgaben zum Studium des Marnefeldzuges, 1914* ("Strategical and Tactical Problems for the Study of the Marne Campaign, 1914"), a new and somewhat interesting method of criticizing the leaders of the German Army in 1914 has been initiated. The first of the series, *Studien über die Führung der deutschen 3. Armee in den Tagen vom 27-29 August, 1914* ("Studies of the Leading of the German Third Army, 27th-29th August, 1914"), is by Colonel Constantin Hierl (Berlin, Mittler, 4 marks, with maps in separate case). It resumes the attack on the Third Army, composed nearly entirely of Saxon corps, under a Saxon commander, General von Hausen, which in the first accounts was unjustly made the scapegoat for the great defeat at the Marne.

In an instructive preface, Colonel Hierl points out that there are two ways of usefully studying military history. You can follow out the operations to their conclusion and then, working backwards, seek for the causes of success or failure. Or, carrying out the opposite process, after reaching a certain situation, you may try to place yourself in the position of the leader, with the information he had at the time, and on this come to your own conclusions. They can then be compared with those of the leader in question.

Following the latter method, Colonel Hierl sets two strategical problems, divided into three and five parts respectively, on the operations of Hausen's Army before the battle of the Marne. In the discussion and solution of them, with skilful logic, he shows in the form of proposals of a Chief of the Staff of the Army to the Army Commander, that quite a different decision to the actual one should have been arrived at. In some concluding remarks he accentuates his criticisms to a definitely hostile attitude. His whole argument is directed to insinuate that Hausen should have refused assistance to the Fourth Army (Duke Albrecht of Württemberg) on his right, which had great difficulties in forcing the passages of the Meuse, and about midday on the 28th of August suffered, as Hierl states, a

defeat (*Rückschlag*) on its left wing. Hausen sent first a corps and then the main force of his Army to assist it. In the problem the appreciation is : " No response can be given to the appeal of the Fourth Army for assistance."

The grounds for this refusal are : that the defeat may be merely a local one, and, as far as the Third Army goes, give no reason for a new appreciation of the strategical situation as a whole. A defeat at Stenay, on the Meuse, is no reason for turning away from the south-western direction ordered by the Supreme Command. Even a single corps should not be sent, as that would weaken the Third Army. The uninterrupted advance of that Army south-westward would probably bring immediate relief to the Fourth. Even if later the Supreme Command ordered the Third to the assistance of the Fourth Army, it would be better able to intervene decisively if it had marched on and was well to the south.

It is, of course, impossible to say what might have happened if something different had been done at any moment of the campaign : for instance, if the British I Corps, instead of marching away from the guns of Le Cateau, had fallen on the flank of the German III Corps ; or if Sir John French had not refused permission to Sir D. Haig to intervene in the battle of Guise. But it would seem that Colonel Hierl's solution is open to grave doubt. The German Seventh and Sixth Armies were held up by the French frontier defences ; the Fifth Army at Verdun, as well as the Fourth Army, instead of managing to advance, was checked on the Meuse ; the German Third, Second and First Armies had pushed even further into the trap than the others. With the poor staff work and indifferent system of communications in vogue in the German Army in 1914, the result may be imagined.

As strategic problems Colonel Hierl's propositions are excellent, and they show how far theory is different from practice. But as a form of criticism they are of little value.

Le Combat d'Arsimont. Les 21 et 22 août à la 19^e Division (Paris, Berger-Levrault, 6 francs + 20 per cent.), by Colonel E. Valaché, describes a fight that well deserves record. Arsimont is just south of the Sambre, half-way between Namur and Charleroi, and the combat that took place there was part of the battle of Charleroi. The 19th Division was in the X Corps, the right of Lanrezac's Fifth Army, and it was itself on the right of the Corps, nearest Namur, ahead of the general line, holding a six-mile front from Florrifoux to Tamines.

The narrative is most interesting, not only because it gives in detail the operations of a division in battle, but from the fact that the French had distinctly the better of their antagonists, the 2nd Prussian Guard Division, until the latter was reinforced by the 1st Guard Division and 20th Division on either flank. Colonel Valaché does not appear to have read the German accounts (e.g. in Volume I of the German Official History), but they fully bear out his story, and are therefore mentioned here. The 2nd Guard Division was indeed driven back, reporting to the Guard Corps "that it was going back to the northern bank of the Sambre." Its actual retirement is made out by the German official history to have been due to a mistaken order, but it is freely admitted that :

"the situation of the Prussian Guard was soon very serious. The hostile artillery fire from the heights of Falisole and Arsimont became stronger and stronger. It dominated the high road and the bridge at Auvélais and made traffic as good as impossible."

It is somewhat curious that the French account complains of lack of artillery support, "*tout à fait nul en cette matinée du 22,*" and the German pleads that the French guns were in overwhelming force. When the 19th Division advanced to complete its defeat of the 2nd Guard Division, it was met by reinforcements and the murderous fire of machine guns. Then there was a pause of six hours from 10 a.m. to 4 p.m., when the Germans again made small attempts to push on. At 5 p.m. the 19th Division was ordered to retire on account of events on its left, and, like the British at La Cateau, it broke off the action and retired in broad daylight unmolested and unpursued.

"The hope began to rise that victory would return if operations were conducted with greater wisdom. This hope was not in vain. It was realized fifteen days later on the Marne."

There is a large scale map with five tracings to place over it, and an Order of Battle.

La Navigation intérieure en France pendant la Guerre, by G. de Kerviler, Ingénieur en chef des Ponts et Chaussées (Paris, Press Universitaire, 16 francs), is one of the Carnegie publications on the economic and social history of the war. It is badly got up: the "Table of Contents" has to be searched for, and will be found sixteen pages from the end, wedged in between an index, a list of directors of the history, and a list of monographs already issued.

The compilation contains little but generalities on rivers and canals, and is of no technical value. For instance :

"The Oise in particular suffered gravely in the course of the battle of the Marne. In 1917 the work of repair had mainly to be directed to the Oise lateral canal, the Somme Canal and the St. Quentin Canal, to the Aisne and the Aisne lateral canal. The enemy in retiring from the regions of Ribécourt, Noyon, Chauny and of Péronne, Ham, St. Simon had destroyed all the bridges and mined the locks, so that the latter were unusable. . . . The work done consisted mainly in removing the débris of bridges which blocked the waterway and constructing temporary and permanent bridges, removing sunken boats, trees and other obstacles, repairing weirs and locks, embankments, lockmen's cottages and their outbuildings."

Possibly such a publication may help to bring about universal peace, the object of the Carnegie foundation ; but how it is to do so is somewhat hard to see.

Le "Grosse Bertha" et le bombardement de Dunkerque, by General R. Pontus (Brussels, Goemaere, 5 francs), is a pamphlet by a Belgian artillery officer which gives an account of the struggle with the German long-range guns which bombarded Dunkirk, and occasionally Bergues and other localities. At first it was not credited that the shells that fell 25 miles behind the front could come from a land gun ; but eventually they were traced to one at Predikboom (3 miles behind Dixmude). It was knocked out by artillery fire, as were its two successors. The Germans then chose another emplacement at Leugenboom (9 miles east of Nieuport) ; it was soon discovered, but it was beyond the range of the Allied guns available, and, though engaged by aircraft, the gun fired with impunity until the German retreat, when it was abandoned and became a war trophy.

La Violation de la Neutralité Belges et ses avocats, by Dr. A. de Ridder (Brussels, Dewit, 15 francs), is a useful account, with the antidote, of the campaign waged by Germany in the press to justify her violation of Belgian neutrality in August, 1914. In this she has employed her best writers, historians, journalists and professors. Some of their efforts have been noticed from time to time in these pages. The main points argued by the Germans are that the treaty of 1839, which guaranteed the neutrality of Belgium, must have lapsed because Great Britain in 1870 inquired of Prussia whether she meant to observe it. Even according to German authorities, the negotiations of 1870 did not abrogate Belgian neutrality, but

reinforced it. Secondly, it is urged that Belgium, by making alliances with France and Great Britain, voluntarily abandoned her neutrality. No such alliances, treaties, conventions or agreements existed. Thirdly, France is said to have violated Belgian territory before the Germans did. This, of course, is not the case.

The Germans have made much ado about certain papers, which they claim to have found in Brussels, on the subject of the combined action of the British and Belgian Armies in case of invasion of Belgian territory by the German Army. There is, however, no more in them than conversations between Colonel Barnardiston (the British Military Attaché) and the Minister of War, General Ducarne, which the latter reported to his Government, and in which the former expressly said that he was not in a position to bind his Government. The passage through Belgium was not demanded by Germany because that country had broken her neutrality, but on grounds of necessity.

The matter was well summed up by the late Herr Erzberger, when he said :

“ We have no right to reproach Belgium with arrangements with England having protection against invasion for their object ; for, in fact, we had been planning such an invasion in silence for years.”

It is in fact admitted that the Schlieffen plan was made as far back as 1905, several years before the Barnardiston conversations.

UNITED STATES OF AMERICA

It is as well that we should know what is thought of the war by other people in other countries. *The Great Crusade*, by Major-General Joseph T. Dickman, with a foreword by General John J. Pershing (New York, Appleton, 18s.), gives an American view. General Dickman commanded the American 3rd Division, which took part in the repulse of the Germans in the second battle of the Marne, July, 1918 ; the IV Corps in the St. Mihiel offensive in September ; and the I Corps in the advance through the Argonne towards Sedan. After the Armistice he received command of the American Third Army and the Army of Occupation.

His book is partly an account of the operations, partly personal reminiscences. He justifies the title of it, because

“ the ultimate fate of Palestine was decided on the Western front. Who can doubt but for the great expedition from beyond the Western Ocean, the Holy Sepulcher (*sic*) would now be in the hands of the Turk.”

Of the second battle of the Marne, he says :

" The artillery concentration for this battle was the greatest in history. No less than 2,000 batteries of all calibres were in action between Chateau Thierry and the Argonne forest [that is, two-fifths of the German total was on a 70-mile front !]."

The result he describes in italics, giving the words a line to themselves, as " The heaviest defeat of the war ! " Ludendorff holds another opinion, and favours the 8th of August in front of Amiens.

The capture of the St. Mihiel salient " raised the morale of our troops and of our Allies. The Germans were correspondingly discouraged, and began to realize that final defeat was inevitable." It is, however, admitted that the German resistance was " slight " and " weak," the enemy was in fact in the act of evacuating the salient.

Of the Argonne operations he says : " in the autumn of 1918 there were no troops in Europe, besides the Americans, who could have forced their way through the fortified fortresses of the Argonne Forest." The German account (*see Army Quarterly*, vol. xii, p. 151), by the way, only admits one defeat in the seven weeks' fighting, and speaks of otherwise " uninterrupted victorious defence " during the retirement in the Argonne.

In the closing scene, he thinks :

" As relatively fresh, or even partially rested, German divisions became available, they were directed against the Americans [the situation maps and German accounts tell another story] ; and when the last of them had been thrown in and defeated, there was nothing but an armistice to prevent a German collapse."

" As the American First Army tightened its grip on the enemy's throat, he was forced to let go his position on the Channel coast and in Flanders and Picardy, and to begin a retreat in order to escape the danger of being completely cut off. [By the middle of October the Germans were back on the line Tournay—Courtrai—Ghent, the Americans did not get clear of the Argonne until the 4th of November.] . . . it is too much to expect that writers of countries under financial obligation to us will attribute the German withdrawal to anything but a succession of British and French victories."

General Dickman endeavours to clear up the curious incident by which the American 1st Division, in order to reach Sedan before the French, endeavoured to push through the sector of his corps, " interrupting lines of communication, interfering in a difficult and congested area with lines of supply and mingling with and passing through our troop-formations." He prints the order of the 5th of November, 1918, that he himself received :

"(1) General Pershing desires that the honour of entering Sedan should fall to the American First Army. He has every confidence that the troops of the I Corps, assisted on their right by the V Corps, will enable him to realize this desire.

"(2) In transmitting the foregoing message, your attention is invited to the favourable opportunity now existing for pressing our advance throughout the night. Boundaries will not be considered as binding. By Command of Lieut.-General Liggett.

"Signed, H. A. DRUM,

"Chief of Staff."

He adds :

"At 6.50 p.m. [next day] Colonel U. S. Grant, First Army staff, arrived and again transmitted orders to make Sedan [which was in the French Fourth Army area], disregarding bounds."

The protest of the French commander affected by the result of this order was extraordinarily dignified. After defining the correct boundary, he directed his liaison officer to "ask my brave neighbours to refer the matter to their corps headquarters, which must have made a mistake."

"*Fix Bayonets*," by John W. Thomason, Jr., Captain, U.S. Marine Corps (Scribner's Sons, 12s. 6d.), is a book of a totally different character. With most graphic and picturesque pen and even more talented pencil and brush, he describes the war as seen by a Regular officer commanding Regular troops—"the Leather-necks, the Old Timers." Both text and illustration will commend themselves to the men who fought, except that they make things too real. The expression on the faces and the attitude of some of the figures is wonderful: the anxiety of the runner crouching against the side of a trench under shell fire, the grin on the face of the escort bringing in prisoners, the alertness of the Frenchman about to throw a bomb, and the glare of one thick-bodied German, his face a cast of hate, are lifelike.

In the text there are phrases equally vivid. French supporting artillery sees a German column :

"A cloud hit it for a space. When the cloud lifted the column had disintegrated; there was only a far-off swarm of fleeing figures flailed by shrapnel as they ran. And the glass showed squirming heaps of grey flattened on the ground. The gunner officer looked and saw his work was good. 'Bon, eh? Soixante-quinze!'

"With an all-embracing gesture and a white-toothed smile he went. . . 'Man, I j'est love them little 75's! Swa-sont-cans bon? Say, that Frog said a mouthful!'

The author's impressions of Germany deserve record.

"What about the old Boche? You think him licked enough? No, I don't. That stuff back there, they laid it down under orders, like they do everything. It's stacked—it ain't just thrown away. . . . They ain't licked enough. Look at the country—winter ploughin' done—everything ship-shape—no shell holes—no trenches—no barb' wire—who in hell won this war anyway? You said it. We oughter got up here an' showed ole Boche what it was like, to have a war in his yard. . . ."

"There were little round-faced girls with straw-coloured braids, and cloaks. They did not look poorly fed, like the waxen-faced children the battalion remembered in France. And at every corner there were more of them. The battalion was impressed. 'Say—you see all those kids—all those little square-heads! Hundreds of them! Something's got to be done about these people. I tell you these Boche are dangerous! They have too many children.'"

GENERAL

The fourth volume of Colonel Constantin Hierl's most instructive commentaries on the war, *Der Weltkrieg in Umrissen* ("The World War in Outline") (Charlottenburg, Offene Worte, 8 marks)—which is understood to be used as a text-book in the *Reichswehr* schools of instruction—includes a retrospect of 1915, the war plans for 1916, and the events in 1916 up to the end of August, including the supersession of General von Falkenhayn. There is a chapter on internal conditions in Germany and Austria. Like its predecessors, the book contains a short outline of events, followed by remarks.

The author takes a pessimistic view of the year 1916, which brought victories without success. Of the Russian front he says :

"The result of the great Russian summer attack regarded by itself was certainly a severe failure for the Russian Army, but its sacrifices brought great advantages to the general situation of the Entente Powers. This campaign cost the Central Powers a heavy price, brought the Austrian Army near to collapse, drew against them strong forces of the Central Powers, and greatly relieved the Allies in Italy and in the West. Finally, it was the cause of Rumania joining the Entente. In all the main theatres of war the Central Powers were thrown on a hard-pressed defensive." Twenty German divisions had to be sent to the Eastern front as reinforcements, and "the general situation of the Central Powers changed for the worse."

Of the Austrian attack from the South Tyrol, he says it

"had already run its course and stopped before the unfortunate events on the Eastern front had had any effect. . . . The unsuccessful attack against Italy bears the characteristic features of the leading of General von Conrad : bold conception and unquenchable optimism, unrestrained

by sober appreciation of realities, and the inclination to over-estimate the capacity of his own army and under-estimate that of the enemy."

Colonel Hierl approves the choice of Verdun as the place of attack, because, being one of the strongest sectors of the enemy's front—in spite of what the French may say to the contrary—it offered opportunity for a surprise attack with a limited objective ; and the capture of such a fortress would have an immense effect. The attack failed because it was conducted on too small a scale. Falkenhayn only employed eight of the twenty-six divisions of his general reserve. It should have been stopped in March. Though the proportion of losses may have been two Germans to five Frenchmen, at the beginning of April, " our losses were too heavy for us. We should not have fought such an attrition-battle voluntarily : we had not sufficient men, apparatus and munitions."

The German conduct of the battle of the Somme is severely criticized. Falkenhayn would not provide the necessary forces in time to prepare for a defensive battle.

" As a result, the divisional sectors on the main battle front at the beginning of the battle were too wide (up to nearly six miles), reserves were too weak and often too far back, the equipment of the front with artillery and aeroplanes was insufficient. The consequences were often a hurried employment of reinforcements and a serious break-up of formations. . . . The conduct of the battle by the Allies gave it intentionally the impress of an attrition and material battle. They were right in this. The great enemy superiority in war apparatus and men was thus made to pull its weight, whilst the superiority of the German leading and training did not get its proper return and diminished more and more as the Old Army disappeared in the long-drawn-out battle. . . .

" The German battle procedure in the first months of the fight did not fit the circumstances of a long-drawn-out and material battle. The German leading clung too obstinately to the idea of never giving up ground. In connection with this theory, the front lines were too thickly held. Thus good targets were offered to the effects of the superior enemy artillery."

" The Order of the German First Army : ' Not a sole's breadth of ground must voluntarily be abandoned. Only over our bodies may the enemy come,' was appropriate at a moment when the front began to yield and a break-through seemed to threaten. Retained as a principle in a long-drawn-out battle, the clinging to every inch of ground was a mistake. It led to heavy losses which were avoidable, and aided the attrition purposes of the enemy. . . .

" The German front in the first two months of the battle of the Somme was driven back about four and a half miles on a breadth of twelve miles. The loss of ground was of no strategic importance. But the importance of the course of the battle must not be measured by this. The great losses in men, the heavy expenditure of material ate only too strongly into

the strength of the German Army. The mighty material superiority of the enemy did not fail to have its psychological effects on the German combatants. The enemy's commanders may put this down on the credit side as a profit of their attrition purposes."

In the chapter on the economic and internal political situation in Germany and Austria, Colonel Hierl attributes the bad situation in Germany in the autumn of 1916 to the bad organization of the distribution of food supplies, to profiteering, to the weakness of the Chancellor, Bethmann-Hollweg, to the machinations of the Socialists, and to the influence of the Jewish financiers, "whom it did not suit that the Kaiser should return as victor." As for Austria, she suffered worse than Germany from the blockade, and internal dissensions were tearing her asunder, the Austrian Minister President, Count Stürgkh, being murdered by a Jewish member of Parliament in October, 1916.

Falkenhayn's leading is severely condemned: "it was not designed to combat the political intentions of the enemy and did not correspond to the nature of the war as a fight for German existence"; it exhausted Germany and obviously strengthened the enemy.

It is notorious that the German Army and Navy were accompanied into the field by a staff of historians, artists and photographers, who were commissioned to prepare the record of its triumphs in volumes entitled *Krieg und Sieg* ("War and Victory"). Defeated in the field, the record, or at least some of the illustrations, has been published all the same in a most sumptuous volume at £3 15s. net—it would cost twelve guineas at least to produce in England. That there is a sale for such a work seems evident from the fact that the copy under review is the second edition. It is entitled *Ehrendenkmal der Deutschen Armee und Marine, 1871-1918* ("The Memorial of Honour of the German Army and Navy, 1871-1918"). The publisher is Mittler.

After thirty pages devoted to the history of the Army, there are chapters on the various arms of the service, departments and staffs at the outbreak of war, two hundred pages on their development during the war, and a hundred on the war on land, forty pages on the Navy, and forty on the German colonies. The contributors include the ex-German Crown Prince, Field-Marshal von Hindenburg [who writes an autograph preface] and Field-Marshal von Mackensen, General von Kuhl writes on the staff, Kress von Kressenstein on Palestine, von Wrisberg on organization, von Poseck on cavalry, Colonel Nicolai on secret service, Court-preacher

Vogel on the chaplains, and equally great experts on the other subjects.

But the beauty of the great volume, 16 inches by 11 inches, consists in its illustrations, 15 reproductions in colours, 50 in half-tone, by well-known German artists, and photographs of scenery and of the old Army in peace time. The pictures owe something to the artists' imagination, as there is one of a British cavalry charge on the German line at Neuve Chapelle, March, 1915. The artist does not seem to be aware that the battlefield was cut up by dykes full of water, which made it difficult even for infantry to move. Equally true to life, no doubt, is a picture of the ex-Kaiser, with the faithful Hindenburg on one side and the pliant Ludendorff on the other, in the act of planning the March offensive on a map.

The purpose of the volume is divulged in the final section, which contains an exordium by the leader of the *Stahlhelm Bund*.

There is a map of the world on Mercator's projection, showing by a small green patch Germany and the territory of her Allies, while practically all the rest of the world—most of Europe, all Asia, most of Africa and America—is coloured red as representing Germany's enemies.

EASTERN FRONT

Le Guerre d'indépendance en Finlande (Helsingfors, Otava, no price), by General Ignatius, is a French translation by M. Perret of a Finnish book. It gives a lively account of the campaign in January–April, 1918, in which the Finnish nationalists, with the support of a German division under General Mannerheim, expelled the Regular Russian troops and Bolsheviks. The book is well illustrated and has maps.

L'Aventure Allemande en Lettonie, par le lieut.-colonel du Parquet (Paris, Charles Lavauzelle, 18 francs), with a preface by General Niessel, formerly French representative in those parts, is an excellent summary of the history of Latvia (between Esthonia and Lithuania), and the German attempt to annex Russia's Baltic provinces. Originally occupied by the Teutonic knights, who reduced the indigenous population to the level of serfs, the province, after being seized by the Swedes, had been conquered by Russia. The German aristocracy, which only formed 5 per cent. of the population, was left in possession of the land, and became known as "Balts," German-speaking Russians. In the years before the

war, the aristocracy made every effort to introduce German colonists.

The native Latvians served Russia faithfully during the war, although the conduct of the Balts—General Rennenkampf being one of them—was open to suspicion. In 1917, after the Russian revolution, Latvia declared her independence. But Germany had other views, and proceeded to form Baltic States. In November, 1918, at the German revolution, a national Latvian council was formed, but had to fly before a Bolshevik invasion. In February, 1919, General von der Goltz and his division, which had been assisting the Finns, arrived, under the pretence of defending Courland against the Bolsheviks, and by a *coup d'état* in April placed a pro-German Government of Balts in power. Fortunately, at this moment when the Germans and Balts were setting about killing the nationalist Latts under the pretence that they were Bolsheviks, the International Mission (American, French and British) arrived at Riga. They found that fifty to sixty political prisoners were being shot daily without trial. The steps by which the Germans were forced to evacuate Courland are related at length. Then followed a struggle with the Bolsheviks. The Nationalists in the end were successful, and on the 26th of January, 1921, the Supreme Council of the Allied Powers formally recognized the Latvian Republic.

The Archduke Joseph, who commanded the Austrian 31st Division and later the VII Corps, has issued the first volume of his reminiscences, in Hungarian, unfortunately. The title translated is *The World War and How I saw it*. It is published by the Hungarian Academy of Sciences, Buda Pest, at 64 pengö, and is well provided with maps, and founded on diaries and official records.

First sent in the Austrian Second Army to the Serbian theatre, the 31st Division was railed back to Galicia in time for the Lemberg fighting.

REVIEWS AND NOTICES OF RECENT BOOKS AND ARTICLES ON MILITARY SUBJECTS

The Remaking of Modern Armies. By Captain B. H. LIDDELL
HART. John Murray. 10s. 6d.

THIS book comprises a number of articles, contributed to various periodicals (the *Army Quarterly* among them) during the past two years, and therefore inevitably suffers, to a certain extent, from repetition and redundancy. The author's main thesis, however, stands out all the more clearly for this. It is hardly necessary to tell those who are familiar with the name and writings of Captain Liddell Hart, that the book is a warm and convincing plea for the mechanization of modern armies, and in particular for that of the British Army, which the author rightly states to be peculiarly fitted to undergo such a transformation. We have the brains to invent, the resources to produce, and the money to maintain the machines—such as the tank, the dragon, the half-track and multiple-wheeled vehicle—which alone can restore to armies the mobility recently lost to them by reason of the vast development in the fire-power of modern weapons and the enhanced strength of the defensive. We have, what other European Powers have not to the same degree, a mechanically-minded nation to draw upon for our recruits. Our Army is not so large that the cost of placing it on a completely mechanical basis would be prohibitive; nor are its terms of service too short to allow it being so thoroughly trained as to get full value out of the machines with which it would be equipped. Only the will to carry out the transformation appears to Captain Hart to be lacking, and this he attributes to the tyranny of antiquated and out-of-date ideas, based on a misconception of the lessons of the past and believing in numbers, brute force and attrition as the only factors really decisive in war. He tilts in one article against what he calls this “Napoleonic fallacy,” and his thesis, whatever one may think of it from the point of view of historical criticism, certainly seems valid enough as regards its application to the immediate future. But his discussion of what is surely the main difficulty in

the way of the immediate mechanization of our Army—the need for finding annual drafts for our garrisons overseas and in India, which for the present must in the main be drawn from non-mechanized units—strikes one as decidedly inadequate and, until this difficulty is minimized or removed, it is safe to prophesy that our Army at home, and therefore our expeditionary force in case of war, must still include a large proportion of the older arms. There appear to be only two possible ways of dealing with the problem thus raised. Either those responsible for the security of our overseas possessions must be convinced, probably by actual experience, that their defence by mechanized forces is a practical proposition; or a separation must take place between the units destined to fight in Europe in case of war and those whose task it is to garrison our overseas territories in time of peace. The latter course would mean the abandonment of the Cardwell system, and the maintenance in future of two separate armies—the Home Army and the Imperial Army, with two quite distinct rôles both in peace and in war. Captain Hart seems to us to slur over this vital question and somewhat to neglect its importance.

Another point of interest is his discussion of the possibilities of the new small tanks or tankettes, and his imaginative picture of a fleet of these little machines in action deserves careful study. It is a statement frequently made—though perhaps less frequently now than some years ago—that, as there was eventually found “an answer” to the armoured knight and to the long-bow, so there will surely be found “an answer” to the tank. Apart from the fact that in an age of almost incessant warfare, it took four hundred years to find an answer to the armoured knight, and two hundred years to find one to the long-bow, the fact remains that no effective counter to the tank was found in the late war, that any steps taken in this direction since its conclusion have probably been more than outweighed by improvements in the tank itself, and that the tankette has opened up an entirely new field of possibilities in the action of mechanized forces. It seems certain, moreover, that whatever may be the eventual answer to the battle tank, the problem of defence against the tankette requires quite different methods and will probably be one of much greater difficulty.

We have dealt mainly in this review with the author's papers on the question of mechanization, because this is clearly the thing he has most at heart, and it forms the main thesis of his book. But there is in it much other matter of interest and value, particularly the discriminating and thoughtful series of articles on the present day

strategical and tactical tendencies of the French and German Armies, which well repay close study, and some suggestions for the future drill and armament of infantry, which may somewhat solace that arm for the restricted field of activity foreseen for it in the next war by the author. But when will Captain Liddell Hart give us a comprehensive and systematic statement of his proposals for the mechanized British Army of the future—that new “New Model” which may be destined to make as much history, and mark as distinct an epoch in the development of military methods, as its great prototype of Cromwell’s day?

Imperial War Museum : 10th Annual Report, 1926–1927. Price 1s. H.M. Stationery Office.

This annual report is interesting reading, as it shows how much the Imperial War Museum is appreciated and the amount of work it does. For instance, orders for prints and lantern slides average over 500 a month. The number of visitors for the year ending the 31st of March, 1927, was 198,172.

The Journal of the Society of Army Historical Research, April, 1927. Price 6s. Sir W. C. Leng & Co., Sheffield.

There is always good reading in this journal, and this number is no exception. Perhaps the most interesting article is a letter on the Battle of Fontenoy written the day after the battle by Charles James Hamilton.

Light and Shade in Bygone India. By Lieut.-Colonel L. H. THORNTON, C.M.G., D.S.O. London : John Murray. 15s.

It is hardly apparent from the title that Lieut.-Colonel Thornton has written the story—and written it well—of the British campaigns in Southern India associated with the names of Hyder Ali and of Tippoo his son. The book can heartily be recommended to a far wider circle than that of young officers whom the author would encourage to a study of the period. Lieut.-Colonel Thornton is with Macaulay in considering that it is not beneath the dignity of a narrator of historical events to dwell on the details which constitute the charm of biography. He has skilfully woven the experiences of David Baird’s life into a short history of and commentary on the Mysore Wars. He has gone to many other authorities as well—*vide* the valuable list of those consulted—to show how the details

of war are affected by human nature. Therein lies a great value in the book.

The period repays study. The relations of the civil administrations, particularly that of Madras, with the soldiers in their employ provide lessons for the conduct of war from which new generations can still afford to learn. It was a period of famous men, both statesmen and soldiers. A period during which Hastings, Cornwallis and Wellesley in turn held the chief power in Bengal; when Eyre Coote and Harris were commanders-in-chief, and the future Duke of Wellington learnt those lessons in organization which were to be put to such good use in the Peninsula; when Floyd and Dallas proved what well-trained cavalry could effect; when the exploits of Flint and Allan showed that British subalterns only needed their opportunities. It is good, too, to have commanders like Joseph Smith and Fullarton rescued from oblivion.

The first chapters contain a most useful sketch of the general conditions of life in military circles at that time. It is a great pity that the maps do not open outside the pages.

A Famous Indian Regiment. By the late Colonel Sir R. HENNELL, C.V.O., D.S.O., O.B.E. Murray. 12s.

Under recent reorganization of the Indian Army the old "Kali Panchwin" or Black Fifth has become the 2nd Battalion of the 5th Mahratta Light Infantry. Although the battalion began its life in 1768 as the 2nd Battalion of Bombay Sepoys it has borne the number "fifth" through a hundred years and more. From 1768 to 1888 it showed in innumerable campaigns of what stuff the men of the Dekhan were made. Then came a long peace during which the "Powers that Be" were apt to think that only the men of the north made soldiers. Mesopotamia from 1914 to 1919 proved once again the bravery and toughness of the wiry Mahratta. The 105th, as it was then called, added to the laurels already gained by its linked battalions of Mahrattas. The present composition, which is three-fourths Mahratta and one-fourth Dekhani Mussulmans, has varied but slightly during 35 years. It is a pity that the earlier records give no information about the composition during the Mysore, Mahratta, or Afghan wars.

The late Sir Reginald Hennell was an example of the way in which the Indian Army is served by its retired officers. No one is more appreciative of interest thus shown than the rank and file, and it is a great factor in the *esprit de corps* of Indian units. It is to be hoped that the men of the battalion will have the advantage of

a translated edition. Although the author's method of giving briefly the causes of the campaigns in which his old corps participated is to be commended, it is felt that he has gone to unnecessary lengths in describing the early history of India.

France, Spain and the Rif. By WALTER B. HARRIS. Edward Arnold. 21s. net.

To dispose of grumbles first—the index is chary and unhelpful, which is a pity in a book of this kind, and it is inconvenient that there is no general map of Morocco included on which to follow the wider affairs dealt with.

Mr. Harris has a very great knowledge of the history, geography, and affairs of Morocco, and he has been a personal friend of the leaders on all sides in the late troubles in the Rif, and often acted as a trusted intermediary between them. He traces the growth of French and Spanish interests in Morocco, and gives a complete description of the Rif, and of its mostly Berber population, whose early origin frequently persists in fair hair and blue eyes and always in an incorrigible unorthodoxy both in religion and politics. This is followed by a clear and concise account of the war and the causes of its failures and the final victory, of the great administrative work and leadership of Marshal Lyautey, of the astonishing achievements and very remarkable personality of Abdel Krim, and of the circumstances which led Spain into the Rif and denied her administration the success which attended that of the French. But, able and helpful as is Mr. Harris's exposition of politics and the war in the Rif, the interest of his book is still greater through his enlightening and sympathetic picture of this brave, hardy, cruel and treacherous, hard-working, thrifty, ancient, and yet promising, Berber race. Into them and their affairs a real insight is imparted. Some thirty excellent photographs illustrate a good book which should not be missed.

Narratives of Some Passages in the Great War with France (1799–1810). By Sir HENRY BUNBURY. With an Introduction by the Hon. Sir JOHN FORTESCUE. Peter Davies. 10s. 6d. net.

Last January we reviewed "The Memoires of Sergeant Bourgonne, 1812–1813" in these columns. That admirable volume could have no better companion than the book now under review, which comes from the same publisher in the same pleasing form, at the same reasonable price and with an introduction from the same distinguished pen. There appears to have been no reprint of "The

Great War with France" since the original publication in 1854, and Sir John Fortescue and Messrs. Peter Davies deserve our gratitude.

At the age of twenty-one, Henry Edward Bunbury was aide-de-camp to the Duke of York during the campaign in North Holland in 1799; he was Quartermaster-General to the British forces in the Mediterranean from 1805 to 1809, and Under-Secretary of State for War from that year until 1816. He thus had personal knowledge of much that he writes about, with the great advantage of intimate association with many of the chief actors in his story. That story consists of three narratives, North Holland in 1799, Egypt in 1801, and "Military Transactions in the Mediterranean, 1805-1810," connected by reviews of the intervening periods, and preceded by an account of our military condition from 1792 to 1799, which is a masterpiece of concise illumination.

To the general reader of our military history the events dealt with in this book are entirely overshadowed by the story of our effort in the Peninsula, and for that reason alone the change of view is salutary. But the book itself has every virtue of military history: it is short, clear, and very vigorous, and the author was a writer of great ability, who not only possessed sound military judgment and had himself been a good soldier but was also a man of affairs, of fine education and wide interests. His views are trenchant and severe (and none the worse reading for that), but he supports them fully with evidence; and he is as reasonable in his constructive criticism as in his strictures. Indeed, Sir John Fortescue roundly declares that, "with some knowledge of our military history," he considers Bunbury's book the best military history in our language.

Among its chief excellences are the valuable and intensely living portraits which Bunbury raises in the reader's mind, not only of the commanders and other prominent individuals, but of the troops themselves. A couple of quotations may show his gift of characterization:

"Sherbrooke was no ordinary man; few officers could have discharged with better judgment, none with more unwearied activity and zeal, the arduous duties which devolved upon him after Moore's departure. He was an original. A short, square, hardy little man, with a countenance that told at once the determined fortitude of his nature. Without genius, without education, hot as pepper, and rough in his language, but with a warm heart and generous feelings; true, straightforward, scorning finesse and craft and meanness, and giving vent to his detestation with boiling eagerness and in the plainest terms. As an officer, full of energy, rousing others to exertion, and indefatigable in his own person."

As for the Court of Palermo—"They could not comprehend a man who told them only what he wanted, and what he thought, without caring whether they were pleased or not. They were always imagining, and perplexing themselves by attempts to discover some hidden designs or reserved opinions; while in Sherbrooke's nature there was neither concealment nor reserve."

And, for the troops, this extract from the account of an incident seen by Bunbury himself. The scene is at the close of hard and disastrous fighting and retreat on the 19th of September, 1799 :

"He assured me that his men were quite worn out; and he appeared to have lost the powers of his mind under fatigue of body and anxiety. At this moment a grenadier, lifting his chin from the muzzle of the musket on which he was leaning, said in a loud and steady voice, 'Give us some more cartridges, and we will see what can be done.' The officers who were anxiously clustering about us at the head of the column, caught up the prompter's word. Maitland cried, 'Shoulder arms!' They marched for Krabbendam; and I galloped to find and bring them a supply of ammunition."

The publisher has wisely reproduced the original maps, which are very pleasing to the eye, and can be sufficiently supplemented by reference to any good atlas.

The reviewer, at any rate, has never read military history with so much enjoyment, and never, he feels sure, with more enlightenment and profit.

The Battle of Monmouth. By the late WILLIAM S. STRYKER. Princeton University Press. \$4.50. (In England, Humphrey Milford. 21s. net.)

The late General Stryker, who was a prominent citizen of New Jersey, died shortly after completing this book in 1899, at a time when the movement towards a dispassionate and impartial review of Anglo-American history had not gained much ground with American writers. In the available space it is not possible to deal with the many contradictions into which the author is led by his determination that Washington shall always be right and the British as wrong as possible. "With great wisdom, as all military students now agree," Washington, in December, 1777, placed his army at Valley Forge, only twenty-one miles from Philadelphia and Sir William Howe; yet General Stryker could not understand why Howe, "with his magnificent army," did not scatter with one blow the ragged and starving soldiers only a day's march distant. "He

knew that his foe were starving, freezing and dying," but he thought of the cold and toil and trouble. As for the magnificent army, we are told that it was demoralized by a winter of wild dissipation of every kind, of flagrant vice, caused by the idle and dissolute character of its commanding officer, which had rendered it utterly regardless of its duty to its king. Of Howe's successor, Sir Henry Clinton, "there is a tradition in Mrs. Bunting's family" that he was drunk during the night before the battle. Nor is it only the British; Charles Lee, since Washington was afterwards to think ill of him, "took the oath of allegiance with no doubt a wicked mental reservation that he would act as he thought his own personal interests required."

In short, this is not a good history of this isolated and not very important battle. It is lacking in judgment, fairness, and sense of proportion, and it is clogged with a mass of irrelevant details. Yet indirectly a useful picture of the American Army and its difficulties may be gleaned from it; and there is an interesting discussion as to whether Washington swore at Lee or not, which recalls the "*mot de Cambromne*."

The illustrations are photographs of purely sentimental and local interest, and the single map bears neither scale nor the necessary topographical detail for following the text.

ARTICLES IN REVIEWS

The National Review, July, 1927. "Lord George Murray and the 'Forty-Five,'" by the Rt. Hon. Sir John Ross, Bart.

The Nineteenth Century and After, July, 1927. "The Reforms and the Indian Army," by Lieut.-Colonel Aubrey O'Brien, C.I.E., C.B.E.

The Quarterly Review, July, 1927. (1) "Mr. Churchill as Historian," by Colonel the Lord Sydenham of Combe, G.C.M.G.

This article forms a review of *The World Crisis*, 1916-1918.

(2) "The Problem of Disarmament," by Luigi Villari.

LIST OF BOOKS RECEIVED

"Casper Collins. The life and exploits of an Indian fighter of the sixties." By Agnes Wright Spring. Published by The Oxford University Press. 14s. net.

"The Oxfordshire and Buckinghamshire Light Infantry Chronicle, 1926." Edited by The Chronicle Editorial Committee. Vol. XXXIV. Published by Slatter & Rose, Ltd., Oxford.

"Imperial War Museum. 10th Annual Report, 1926-1927." Published by His Majesty's Stationery Office. 1s. net.

"The Royal Montreal Regiment. 14th Battalion C.E.F. 1914-1925." By R. C. Fetherstonhaugh. Published by The Royal Montreal Regiment, Canada.

"Un Officier D'Infanterie à la Guerre." By F. Boillot. Published by Les Presses Universitaires de France, Paris. 15 francs.

"Tseng Kuo-Fan and the Taiping Rebellion." By William James Hail, Ph.D., D.D. Published by The Oxford University Press. 18s. net.

"A Short History of the Royal Regiment of Artillery." By W. O. J. Loughlin. Published by Gale & Polden, Ltd. 1s. 6d. net.

"Sea Escapes and Adventures." By "Taffrail" (Commander Taprell Dorling, D.S.O., R.N.). Published by Philip Allan & Co., Ltd. 10s. 6d. net.

"Command and Discipline." By Vice-Admiral Sir Herbert W. Richmond, K.C.B. Published by Edward Stanford, Ltd. 5s.

"The Non-Commissioned Officers' Guide to Promotion in the Infantry." Vol. I. By Major T. J. Edwards. Published by Gale & Polden, Ltd. 6s. 6d. net.

"The Non-Commissioned Officers' Guide to Promotion in the Infantry." Vol. II. By Major T. J. Edwards. Published by Gale & Polden, Ltd. 6s. 6d. net.

"The Battle Book of Ypres." Compiled by Beatrix Brice. Published by John Murray. 10s. 6d. net.

"Essex Units in the War." 1914-1919, Vol. II. By John Wm. Burrows, F.S.A. Published by Burrows & Sons, Ltd. 5s. net.

"The West Yorkshire Regiment in the War, 1914-1918." Vol. II. 1917-1918. Published by John Lane The Bodley Head Ltd.

"The History of the British Army." Vol. XII. with maps. By the Hon. J. W. Fortescue. Published by Macmillan & Co., Ltd. 40s. net.

PARLIAMENTARY NOTES

HOUSE OF COMMONS

RECRUITING.—On the 14th of June, in reply to a question by *Mr. Thurtle*, the *Financial Secretary to the War Office* stated that the numbers of recruits approved during the first five months of the current year and the same period of last year were 12,436 and 12,549 respectively.

TANKS.—On the 7th of July, in reply to a question by *Lieut.-Commander Kenworthy*, the *Secretary of State for War* informed the House that the present standard tanks in use were the Mark I, Mark IA and Mark II light tanks, the average cost of the three, excluding guns, being approximately £7,700.

REMOUNT SERVICE.—On the 15th of July, in reply to a question by *Mr. Smithers*, the *Secretary of State for War* gave some comparative figures relating to the Remount Service in 1913 and 1927. The number of horses and mules on the British Establishment in 1913 was 28,849, and in 1927 is 19,603. The Remount Department had since 1913 taken over the Light Horse Breeding Scheme from the Board of Agriculture and the work on classification of horse population from Territorial Adjutants.

GERMANY (ARMIES OF OCCUPATION).—On the 19th of July, in reply to a question by *Mr. Trevelyan*, the *Secretary of State for War* stated that during the twelve months ending June, 1927, the strengths of the Allied Armies of Occupation had fallen by approximately 6,000.

ESTIMATES.—On the 28th of July, in reply to a question by *Colonel Woodcock*, the *Secretary of State for War* gave the House the following figures as representing the comparative estimates for the Army and the War Office Staff for 1913 and 1926 :

		1913.	1926.
Army : Net cash total of Army Estimates	..	£27,000,000*	£42,500,000
War Office Staff : Pay and Allowances	£440,000	£934,000

* Excludes £520,000 provided for Aviation.

CHINA (BRITISH FORCES).—On the 28th of June, in reply to a question by *Lieut.-Colonel Sir Frederick Hall*, the *Secretary of State for War* informed the House that, in addition to the normal establishment of three infantry battalions, there were then stationed in China and Hong Kong 17 infantry battalions and one Marine battalion with ancillary troops. There had up to date been one soldier killed and two officers and nine other ranks wounded. Nine other ranks had died as a result of illness or accidents. The average weekly number in hospital during the four weeks up to the 17th of June were 22 officers and 895 other ranks.

On the 12th of July, in reply to a question by *Mr. Trevelyan*, the *Secretary of State* gave some detailed information as to the statistics of sickness at Shanghai and Hong Kong and stated that some increase was to be expected during the hot weather, but that authority had been given for one battalion at a time to be sent from Shanghai to Wei-hai-wei during the summer months.

On the 26th of July, in reply to a question by *Mr. T. Kennedy*, the *Financial Secretary to the War Office* stated that there had been 12 deaths in China among the British troops and 2 among the Indian troops, not forming part of the permanent establishment. Eight of the cases were due to illness and the remainder to accidents or wounds.

APPENDIX

[*Supplied from official sources with the permission of the Controller of His Majesty's Stationery Office.*]

I. THE ARMY

1. ARMY COUNCIL

The Rt. Hon. Sir W. Laming Worthington-Evans, Bart., G.B.E., M.P.,
Secretary of State for War (President of the Army Council).

The Rt. Hon. Colonel the Earl of Onslow, O.B.E., Res. of Off., *Parliamentary Under-Secretary of State for War (Vice-President of the Army Council).*

General Sir George F. Milne, G.C.B., G.C.M.G., D.S.O., LL.D., Col. Comdt. R.A., *p.s.c.*, *Chief of the Imperial General Staff (First Military Member).*

General Sir W. P. Braithwaite, K.C.B., *p.s.c.*, A.D.C., *Adjutant-General to the Forces (Second Military Member).*

Lieutenant-General Sir W. Hastings Anderson, K.C.B., *p.s.c.*, *Quarter-Master General to the Forces (Third Military Member).*

Lieutenant-General Sir Webb Gillman, K.C.B., K.C.M.G., D.S.O., *p.s.c.*, R.A., *Master-General of the Ordnance (Fourth Military Member).*

Commodore H. D. King, C.B., C.B.E., D.S.O., V.D., M.P., R.N.V.R., *Financial Secretary of the War Office (Finance Member).*

Sir H. J. Creedy, K.C.B., K.C.V.O., *Permanent Under-Secretary of State for War (Secretary of the Army Council).*

2. DEPARTMENTS OF THE WAR OFFICE

Secretary of State for War

The Rt. Hon. Sir W. Laming Worthington-Evans, Bart., G.B.E., M.P.

Military Secretary to the Major-General Sir G. F. Boyd, K.C.B.,
Secretary of State for C.M.G., D.S.O., D.C.M., *p.s.c.*
War.

Judge Advocate-General. Sir F. Cassel, Bt., K.C.

Chief of the Imperial General Staff

General Sir George F. Milne, G.C.B., G.C.M.G., D.S.O., LL.D.,
Col. Comdt. R.A., *p.s.c.*

Director of Military Major-General J. R. E. Charles, C.B.,
Operations and C.M.G., D.S.O., *p.s.c.*
Intelligence.

Director of Staff Duties. Major-General A. R. Cameron, C.B., C.M.G.,
p.s.c.

Director of Military Training. Major-General H. H. S. Knox, C.B., D.S.O.,
p.s.c.

Adjutant General to the Forces

General Sir W. P. Braithwaite, K.C.B., *p.s.c.*, A.D.C.

<i>Director of Recruiting and Organisation.</i>	Major-General W. H. Bartholomew, C.B., C.M.G., D.S.O., <i>p.s.c.</i>
<i>Director of Personal Services.</i>	Major-General G. J. Farmar, C.B., C.M.G., <i>p.s.c.</i>
<i>Director-General, Army Medical Service.</i>	Lieut.-General Sir M. H. G. Fell, K.C.B., C.M.G., K.H.P.

Quarter-Master General to the Forces

Lieutenant-General Sir W. Hastings Anderson, K.C.B., *p.s.c.*

<i>Director of Movements and Quarters.</i>	Colonel (temp. Col. on the Staff) E. Evans, C.B. C.M.G., D.S.O., A.D.C.
<i>Director of Remounts.</i>	Major-General G. H. A. White, C.B., C.M.G., D.S.O.
<i>Director of Supplies and Transport.</i>	Major-General G. F. Davies, C.B., C.M.G., C.B.E.
<i>Director of Equipment and Ordnance Stores.</i>	Major-General R. K. Scott, C.B., C.M.G., D.S.O.
<i>Director-General, Army Veterinary Services.</i>	Major-General H. T. Sawyer, C.B., D.S.O.

Master General of the Ordnance

Lieutenant-General Sir Webb Gillman, K.C.B., K.C.M.G., D.S.O., *p.s.c.*

<i>Directors of Artillery.</i>	Colonel (temp. Col. on the Staff) S. C. Peck, D.S.O., <i>p.s.c.</i> Colonel (temp. Col. on the Staff) H. R. W. M. Smith, D.S.O.
<i>Director of Fortifications and Works.</i>	Major-General P. G. Grant, C.B., C.M.G.
<i>Director General of Factories.</i>	T. Towsend, Esq., C.B.E., A.C.A.

Parliamentary Under-Secretary of State for War

<i>Parliamentary Under-Secretary of State for War.</i>	Colonel the Earl of Onslow, O.B.E., Res. of Off.
<i>Director-General of the Territorial Army.</i>	Lieutenant-General Sir H. S. Jeudwine, K.C.B., K.B.E., Col. Comdt. R.A.
<i>Comptroller of Lands.</i>	H. G. Goligher, Esq., C.B.E.

Financial Secretary of the War Office

<i>Financial Secretary.</i>	Commodore H. D. King, C.B., C.B.E., D.S.O., V.D., M.P., R.N.V.R.
<i>Director of Army Contracts.</i>	N. F. B. Osborn, Esq., C.B.

Permanent Under-Secretary of State for War

<i>Permanent Under-Secretary of State for War and Accounting Officer.</i>	Sir H. J. Creedy, K.G.B., K.C.V.O.
<i>Deputy Under-Secretary of State.</i>	J. B. Crosland, Esq., C.B.
<i>Assistant Under-Secretary of State.</i>	A. E. Widdows, Esq., C.B.
<i>Chaplain-General.</i>	Rev. A. C. E. Jarvis, C.M.G., M.C., D.D.

3. COMMANDS OF THE ARMY AT HOME**A.—ALDERSHOT COMMAND**

<i>General Officer Commanding-in-Chief.</i>	Lieut.-General Sir D. G. M. Campbell, K.C.B., K.C.M.G., D.S.O.
<i>Colonel on the Staff, General Staff.</i>	Colonel (temp. Col. on the Staff) J. E. S. Brind, C.B., C.M.G., D.S.O., <i>p.s.c.</i>
<i>Major-General in charge of Administration.</i>	Major-General J. C. Harding Newman, C.B., C.M.G., <i>p.s.c.</i>
<i>1st Cavalry Brigade.</i>	Colonel (temp. Col. Comdt.) F. W. L. S. H. Cavendish, C.M.G., D.S.O., <i>p.s.c.</i>
<i>1st Air Defence Brigade.</i>	Colonel C. W. Collingwood, C.M.G., D.S.O.
<i>1st Division.</i>	Major-General Sir C. F. Romer, K.B.E., C.B., C.M.G., <i>p.s.c.</i>
<i>1st Infantry Brigade.</i>	Colonel (temp. Col. Comdt.) Hon. A. G. Hore-Ruthven, V.C., C.B., C.M.G., D.S.O., <i>p.s.c.</i>
<i>2nd Infantry Brigade.</i>	Colonel (temp. Col. Comdt.) A. J. McCulloch, D.S.O., D.C.M., <i>p.s.c.</i>
<i>3rd Infantry Brigade.</i>	Colonel G. Thorpe, C.M.G., D.S.O.
<i>C.R.A. 1st Division.</i>	Colonel (temp. Col. Comdt.) A. G. Arbuthnot, C.M.G., D.S.O.
<i>2nd Division.</i>	Major-General Sir W. E. Ironside, K.C.B., C.M.G., D.S.O.
<i>5th Infantry Brigade.</i>	Colonel (temp. Col. Comdt.) W. W. Pitt-Taylor, C.B., C.M.G., D.S.O.
<i>6th Infantry Brigade.</i>	Colonel (temp. Col. Comdt.) R. D. F. Oldman, C.B., C.M.G., D.S.O., <i>p.s.c.</i>
<i>C.R.A. 2nd Division.</i>	Colonel (temp. Col. Comdt.) S. W. H. Rawlins, C.B., C.M.G., D.S.O., <i>p.s.c.</i> , A.D.C.

B.—EASTERN COMMAND

<i>General Officer Commanding-in-Chief.</i>	Lieut.-General Sir R. D. Whigham, K.C.B., K.C.M.G., D.S.O., <i>p.s.c.</i>
<i>Colonel on the Staff, General Staff.</i>	Colonel (temp. Col. on the Staff) Sir H. J. Elles, K.C.M.G., C.B., D.S.O., <i>p.s.c.</i> , A.D.C.
<i>Major-General in charge of Administration.</i>	Major-General C. W. Scott, C.B., C.M.G., C.B.E., D.S.O., <i>p.s.c.</i>
<i>4th Division.</i>	Major-General Sir P. de B. Radcliffe, K.C.M.G., C.B., D.S.O., <i>p.s.c.</i>
<i>10th Infantry Brigade.</i>	Colonel (temp. Col. Comdt.) T. W. Stansfeld, C.M.G., D.S.O.
<i>11th Infantry Brigade.</i>	Colonel (temp. Col. Comdt.) W. J. N. Cooks-Collis, C.B., C.M.G., D.S.O.
<i>12th Infantry Brigade.</i>	Colonel (temp. Col. Comdt.) E. B. Hankey, D.S.O.
<i>C.R.A. 4th Division.</i>	Colonel (temp. Col. Comdt.) A. B. Forman, C.M.G., D.S.O.
<i>54th (East Anglian) Division.</i>	Major-General Sir T. G. Matheson, K.C.B., C.M.G.
<i>161st Essex Infantry Brigade.</i>	Colonel T. N. S. M. Howard, D.S.O.
<i>162nd East Midland Infantry Brigade.</i>	Colonel J. Brown, C.B., C.B.E., D.S.O., T.D.
<i>163rd Norfolk and Suffolk Infantry Brigade.</i>	Colonel R. M. Luckock, C.M.G., D.S.O., <i>p.s.c.</i>
<i>C.R.A. 54th Division.</i>	Colonel O. M. Harris, D.S.O.
<i>44th (Home Counties) Division.</i>	Major-General A. G. Wauchope, C.B., C.M.G., C.I.E., D.S.O.
<i>131st (Surrey) Infantry Brigade.</i>	Colonel the Lord Roundway, C.M.G., D.S.O., M.V.O.
<i>132nd (Middlesex and Sussex) Infantry Brigade.</i>	Colonel H. C. W. H. Wortham, C.M.G., D.S.O.
<i>133rd (Kent and Sussex) Infantry Brigade.</i>	Colonel R. N. Dick, C.M.G., D.S.O., <i>p.s.c.</i>
<i>C.R.A. 44th Division.</i>	Colonel R. E. Myddleton, T.D.

C.—LONDON DISTRICT

<i>General Officer Commanding.</i>	Major-General the Lord Ruthven, C.B., C.M.G., D.S.O., <i>p.s.c.</i>
<i>General Staff Officer 2nd Grade.</i>	Major A. F. Smith, D.S.O., <i>p.s.c.</i>
<i>26th (London) Air Defence Brigade.</i>	Colonel A. F. Thomson, D.S.O.
<i>56th (1st London) Division.</i>	Major-General H. Isacke, C.B., C.S.I., C.M.G., <i>p.s.c.</i>
<i>167th (1st London) Infantry Brigade.</i>	Colonel G. C. B. Paynter, C.B., C.M.G., D.S.O.
<i>168th (2nd London) Infantry Brigade.</i>	Colonel P. R. O. A. Simner, D.S.O.

C.—LONDON DISTRICT—*continued*

169th (3rd London) Infantry Brigade.	Colonel Lord H. C. Seymoor, D.S.O.
C.R.A. 56th (The London) Division.	Colonel L. S. Bayley, D.S.O.
27th (London) Air Defence Brigade	Colonel C. Buckle, C.B.E.
47th (2nd London) Division.	Major-General L. C. L. Oldfield, C.B., C.M.G., D.S.O.
140th (4th London) Infantry Brigade.	Colonel W. H. V. Darell, C.M.G., D.S.O., <i>p.s.c.</i>
141st (5th London) Infantry Brigade.	Colonel C. H. Pank, C.M.G., D.S.O., T.D.
142nd (6th London) Infantry Brigade.	Colonel T. R. C. Price, C.M.G., D.S.O., <i>p.s.c.</i>
C.R.A. 47th (2nd London) Division.	Colonel E. H. Eley, C.M.G., C.B.E., D.S.O., T.D.

D.—NORTHERN COMMAND

General Officer Commanding-in-Chief.	Lieut.-General Sir C. D. Shute, K.C.B., K.C.M.G., <i>p.s.c.</i>
General Staff Officer 1st Grade.	Colonel H. E. R. Braine, C.M.G., D.S.O., <i>p.s.c.</i>
Colonel on the Staff in charge of Administration.	Colonel (temp. Col. on the Staff) O. H. Delano-Osborne, C.M.G., <i>p.s.c.</i>
5th Cavalry Brigade.	Colonel P. J. V. Kelly, C.M.G., D.S.O.
6th Cavalry Brigade.	Colonel H. S. Sewell, C.M.G., D.S.O.
50th (The Northumbrian) Division.	Major-General Sir G. N. Cory, K.B.E., C.B., D.S.O., <i>p.s.c.</i>
149th (Northumberland) Infantry Brigade.	Colonel H. H. S. Morant, D.S.O.
150th (York and Durham) Infantry Brigade.	Colonel H. L. Alexander, C.B., C.M.G., D.S.O., <i>p.s.c.</i>
151st (Durham) Light Infantry Brigade.	Colonel G. H. Stobart, C.B.E., D.S.O.
C.R.A. 50th (Northumbrian) Division.	Colonel O. C. Niven, D.S.O.
49th (The West Riding) Division.	Major-General N. J. G. Cameron, C.B., C.M.G., <i>p.s.c.</i>
146th (1st West Riding) Infantry Brigade.	Colonel A. J. Hunter, C.M.G., D.S.O., M.C., <i>p.s.c.</i>
147th (2nd West Riding) Infantry Brigade.	Colonel H. B. H. Orpen-Palmer, C.M.G., D.S.O.
148th (3rd West Riding) Infantry Brigade.	Colonel D. S. Branson, D.S.O., M.C.
C.R.A. 49th (The West Riding) Division.	Colonel J. G. B. Allardyce, C.M.G., D.S.O.
46th (The North Midland) Division.	Major-General Sir P. O. Hambro, K.B.E., C.B., C.M.G.

D.—NORTHERN COMMAND—*continued*

- 137th (Staffordshire) Infantry Brigade.
 138th (Lincolnshire and Leicestershire) Infantry Brigade.
 139th (Sherwood Foresters) Infantry Brigade.
 C.R.A. 46th (The North Midland) Division.
- Colonel L. H. P. Hart, D.S.O., T.D.
 Colonel B. A. Smith, D.S.O., M.C., T.D.
 Colonel W. W. Jelf, C.M.G., D.S.O.

E.—NORTHERN IRELAND DISTRICT

- General Officer Commanding. Major-General F. F. Ready, C.B., C.S.I., C.M.G., D.S.O., *p.s.c.*
 General Staff Officer 2nd Grade. Major O. Y. Hibbert, D.S.O., M.C., *p.s.c.*

F.—SCOTTISH COMMAND

- General Officer Commanding-in-Chief. Lieutenant-General Sir W. E. Peyton, K.C.B., K.C.V.O., D.S.O., Col. The 15/19 H., *p.s.c.*
 General Staff Officer, 1st Grade. Colonel R. S. McClenlock, D.S.O., *p.s.c.*
 Colonel on the Staff in charge of Administration. } Colonel (temp. Col. on Staff) C. R. Newman, C.M.G., D.S.O., *p.s.c.*
 51st (The Highland) Division. } Major-General Sir W. M. Thompson, K.C.M.G., C.B., M.C.
 152nd (Seaforth and Cameron) Infantry Brigade. Colonel J. K. Dick Cunyngham, C.M.G., D.S.O., *p.s.c.*
 153rd (Black Watch and Gordon) Infantry Brigade. Colonel A. J. Reddie, C.M.G., D.S.O.
 154th (Argyll and Sutherland) Infantry Brigade. Colonel Sir N. A. Orr-Ewing, Bart., D.S.O.
 C.R.A. 51st (The Highland) Division. Colonel C. B. Clark, D.S.O.
 52nd (The Lowland) Division. Major-General H. F. Thuillier, C.B., C.M.G.
 155th (East Scottish) Infantry Brigade. Colonel S. H. Eden, C.M.G., D.S.O.
 156th (West Scottish) Infantry Brigade. Colonel W. Allason, D.S.O.
 157th (Highland Light Infantry) Infantry Brigade. Colonel R. W. Morgan, C.M.G., D.S.O.
 C.R.A. 52nd (The Lowland Division). Colonel F. Rainsford-Hannay, C.M.G., D.S.O., *p.s.c.*

G.—SOUTHERN COMMAND

<i>General Officer Commanding-in-Chief.</i>	General Sir A. J. Godley, K.C.B., K.C.M.G., <i>p.s.c.</i> , Col. R. U. Rif., A.D.C.
<i>Colonel on the Staff, General Staff.</i>	Colonel (temp. Col. on the Staff) H. Karslake, C.M.G., D.S.O., <i>p.s.c.</i>
<i>Major-General in charge of Administration.</i>	Major-General A. M. McHardy, C.B., C.M.G., D.S.O., <i>p.s.c.</i>
<i>2nd Cavalry Brigade.</i>	Colonel (temp. Col. Comdt.) W. J. Foster, C.B., C.M.G., D.S.O., <i>p.s.c.</i>
<i>3rd Division.</i>	Major-General Sir J. T. Burnett-Stuart, K.B.E., C.B., C.M.G., D.S.O., <i>p.s.c.</i>
<i>7th Infantry Brigade.</i>	Colonel (temp. Col. Comdt.) R. J. Collins, C.M.G., D.S.O., <i>p.s.c.</i>
<i>8th Infantry Brigade.</i>	Colonel (temp. Col. Comdt.) C. J. C. Grant, D.S.O., <i>p.s.c.</i>
<i>9th Infantry Brigade.</i>	Colonel (temp. Col. Comdt.) G. W. Howard, C.M.G., D.S.O., <i>p.s.c.</i>
<i>C.R.A. 3rd Division.</i>	Colonel (temp. Col. Comdt.) H. C. Stanley-Clarke, C.B., C.M.G., D.S.O.
<i>48th (The South Midland) Division.</i>	Major-General T. T. Pitman, C.B., C.M.G.,
<i>143rd (Warwickshire) Infantry Brigade.</i>	Colonel R. S. Popham, C.M.G., D.S.O.
<i>144th (Gloucestershire and Worcs.) Infantry Brigade.</i>	Colonel H. D. Buchanan-Dunlop, C.M.G., D.S.O.
<i>145th (South Midland) Infantry Brigade.</i>	Colonel E. R. Clayton, C.M.G., D.S.O., <i>p.s.c.</i>
<i>C.R.A. 48th (The South Midland) Division.</i>	Colonel R. W. N. Bouchier, D.S.O.
<i>43rd (The Wessex) Division.</i>	Major-General Sir G. D. Jeffreys, K.C.V.O., C.B., C.M.G.
<i>128th (Hampshire) Infantry Bgde.</i>	Colonel H. C. R. Green, C.B., C.M.G., D.S.O.
<i>129th (South Wessex) Infantry Brigade.</i>	Colonel M. H. E. Welch, C.B., C.M.G., <i>p.s.c.</i>
<i>130th (Devon and Cornwall) Infantry Brigade.</i>	Colonel E. Treffry, C.M.G., O.B.E., T.D.
<i>C.R.A., 43rd (The Wessex) Division.</i>	Colonel A. C. R. Nutt, D.S.O.

H.—WESTERN COMMAND

<i>General Officer Commanding-in-Chief.</i>	Lieutenant-General Sir R. H. K. Butler, K.C.B., K.C.M.G., <i>p.s.c.</i>
<i>General Staff Officer, 1st Grade.</i>	Colonel Sir H. Wake, Bart., C.M.G., D.S.O., <i>p.s.c.</i>
<i>Colonel on the Staff i/c Administration.</i>	Colonel (temp. Col. on the Staff) R. F. A. Hobbs, C.M.G., D.S.O., <i>p.s.c.</i>
<i>53rd (The Welsh) Division.</i>	Major-General T. A. Cubitt, C.B., C.M.G., D.S.O., <i>p.s.c.</i>

H.—WESTERN COMMAND—*continued*

158th (Royal Welch) Infantry Brigade.	Colonel C. C. Norman, C.M.G., D.S.O.
159th (Welsh Border) Infantry Brigade.	Colonel Hon. A. F. Stanley, D.S.O.
160th (South Wales) Infantry Brigade.	Colonel D. H. Leslie.
C.R.A. 53rd (The Welsh) Division.	Colonel A. H. D. West, D.S.O.
55th (The West Lancashire) Division.	Major-General B. F. Burnett Hitchcock, C.B., D.S.O., <i>p.s.c.</i>
164th (North Lancashire) Infantry Brigade.	Colonel L. J. Wyatt, D.S.O.
165th (Liverpool) Infantry Brigade.	Colonel M. O. Clarke, D.S.O., <i>p.s.c.</i>
166th (South Lancashire and Cheshire) Infantry Brigade.	Colonel C. N. Perreau, C.M.G.
C.R.A. 55th (The West Lancashire) Division.	Colonel A. H. W. Haywood, C.M.G., C.B.E., D.S.O.
42nd (The East Lancashire) Division.	Major-General C. H. D. Moore, C.B., C.M.G., D.S.O., <i>p.s.c.</i>
125th (Lancashire Fusiliers) Brigade.	Colonel B. D. L. G. Anley, C.B., C.M.G., D.S.O., <i>p.s.c.</i>
126th (East Lancashire and Border) Infantry Bgde.	Colonel R. E. S. Prentice, C.B., C.M.G., D.S.O.
127th (Manchester) Infantry Brigade.	Colonel E. L. Challenor, C.B., C.M.G., C.B.E., D.S.O.
C.R.A. 42nd (The East Lancashire) Division.	Colonel M. Crofton, D.S.O.

J.—CHANNEL ISLANDS

Guernsey and Alderney District :

<i>Lt.-Governor and Commanding the Troops.</i>	Major-General Hon. Sir C. J. Sackville-West, K.B.E., C.B., C.M.G., <i>p.s.c.</i>
--	--

Jersey District :

<i>Lt.-Governor and Commanding the Troops.</i>	Major-General Hon. Sir F. R. Bingham, K.C.B., K.C.M.G.
--	--

4. DISTRIBUTION OF REGULAR UNITS OF THE ARMY

A.—Cavalry Regiments

Regiment.	Station.	Commanding Officer.	Remarks.
The Life Guards (1st and 2nd)	Windsor	Lt.-Col. Hon. G. V. A. Monckton-Arundel, D.S.O., O.B.E.	
Royal Horse Guards (The Blues)	Regent's Park	Lt.-Col. Lord A. R. Innes-Ker, D.S.O.	
1st King's Dragoon Guards	Aldershot	Lt.-Col. W. F. Chappell, D.S.O.	
The Queen's Bays (2nd Dragoon Gds.)	Colchester	Lt.-Col. R. H. Osborne, D.S.O., M.C.	
3rd-6th Dragoon Guards	Tidworth	Lt.-Col. G. A. Sanford, D.S.O.	
4th-7th Dragoon Guards	Sialkot	Lt.-Col. E. M. Dorman, D.S.O., M.C.	
5th Inniskilling Dragoon Guards	Risalpur	Lt.-Col. J. A. Brooke	
1st The Royal Dragoons	Hounslow (for Egypt)	Lt.-Col. W. T. Hodgson, D.S.O., M.C.	
The Royal Scots Greys (2nd Dragoons)	Meerut (for Edinburgh)	Lt.-Col. J. J. Readman, D.S.O.	
3rd The King's Own Hussars	Egypt (for Lucknow)	Lt.-Col. F. R. Burnside, D.S.O.	
4th Queen's Own Hussars	Lucknow (for Meerut)	Lt.-Col. H. E. Macfarlane, D.S.O., M.C.	
7th Queen's Own Hussars	Tidworth	Lt.-Col. Hon. D. P. Tollemache, D.S.O., <i>p.s.c.</i>	
8th King's Royal Irish Hussars	Rhine	Lt.-Col. A. Curell.	
9th Queen's Royal Lancers	Secunderabad	Lt.-Col. J. Greene, D.S.O.	
10th Royal Hussars (Prince of Wales's Own)	Aldershot (for Hounslow)	Lt.-Col. V. J. Greenwood, M.C.	
11th Hussars (Prince Albert's Own)	Shorncliffe (for Aldershot)	Lt.-Col. F. H. Sutton, M.C.	
12th Royal Lancers (Prince of Wales's)	Egypt	Lt.-Col. J. Blakiston-Houston, D.S.O., <i>p.s.c.</i>	
13th-18th Hussars	Edinburgh (for Shorncliffe)	Lt.-Col. W. Holdsworth.	
14th-20th Hussars	York	Lt.-Col. F. B. Hurdall, M.C., <i>p.s.c.</i>	
15th-19th Hussars	Egypt	Lt.-Col. J. Godman.	
16th-5th Lancers	Tidworth	Lt.-Col. G. F. H. Brooke, D.S.O., M.C., <i>p.s.c.</i>	
17th-21st Lancers	Aldershot	Lt.-Col. V. N. Lockett.	

B.—Royal Regiment of Artillery**Stations of Units.***Brigades, Royal Horse Artillery.*

Brig.	H.Q. and Batteries.	—	Brig.	H.Q. and Batteries.	—
1	H.-Q. A, B O	Aldershot	3 (std.) 5	D. H.-Q. G, E	Trowbridge. Meerut.
2	H.-Q. K C L	Aldershot Egypt	Unbrig.	N I M	Risalpur. Sialkot. Secunderabad
3	H.-Q. J, F	Newport (Mon.)			St. John's Wood

Field Brigades, Royal Artillery.

1 (Army)	H.-Q. 11, 80 (H) 52, 98	Shanghai De- fence Force Deepcut	16	H.-Q 27 (H), 34, 72 86 (H)	Kirkee Secunderabad
2	H.-Q. 35 (H) 42, 53, 87	Shorncliffe	17	H.-Q. 10 13, 26, 92 (H)	Bordon
3	H.-Q. 18, 62, 65 (H) 75	Exeter Bristol	18	H.-Q. 93, 94, 95 (H) 59	Woolwich
4	H.-Q. 4 (H), 7 14, 66	Longmoor	19	H.-Q. 29 (H) 96, 97 39	Wiesbaden Larkhill
5 (Army)	H.-Q. 63, 64, 73, 81 (H)	Larkhill	20	H.-Q. 41, 45 (H) 67, 99	Aldershot
6	H.-Q. 69, 74, 77, 79 (H)	Bulford	21 (Army)	H.-Q. Z (H).	Newcastle
7	H.-Q. 9, 17 16 43 (H)	Lucknow Cawnpore Fyzabad		P Q (H) Y	Sheffield Sheffield Newcastle
8	H.-Q. H (H) V, W, X	Brighton	22	H.-Q. 32, 33, 36 (H) 55 (H)	Rawalpindi Campbellpore
9	H.-Q. 19, 20, 28, 76 (H)	Bulford	23	H.Q. 60, 89, 90 (H) 100 (H)	Nowshera Peshawar
10	H.-Q. 51, 54 30 (H), 46	Deepcut	24	H.Q. 22, 50, 56 (H) 70	Jhansi Nasirabad
11	H.-Q. 78 (H), 83, 84, 85	Colchester	25	H.-Q. 12, 25, 31 (H) 58	Bordon
12	H.Q. 6, 23 49 91 (How.)	Lahore Jullundur Ferozepore Lahore	26	H.-Q. 40 (H) 48, 71 15	Jubbulpore Allahabad
13 (Army)	H.Q. 8, 44 82 (How) 2	Edinburgh Dunbar	27	H.-Q. 21, 24, 37 (H) 47	Mhow
14	H.-Q. 68, 88 (H) 38, 61 (H)	Quetta Hyderabad (Sind)	28	H.-Q. 1, 3, 57 (H) 5	Meerut Bareilly
15	H.-Q. R. T, U, S (H)	Bangalore			

Allotment of Batteries to Field Brigades.

Batt.	Brig.	Batt.	Brig.	Batt.	Brig.	Batt.	Brig.	Batt.	Brig.	Batt.	Brig.	Batt.	Brig.
H	8th	1	28th	18	3rd	35	2nd	52	1st	69	6th	86	16th
P	21st	2	13th	19	9th	36	22nd	53	2nd	70	24th	87	2nd
Q		3	28th	20	"	37	27th	54	10th	71	26th	88	14th
R		4	4th	21	27th	38	14th	55	22nd	72	16th	89	23rd
S	15th	5	28th	22	24th	39	19th	56	24th	73	5th	90	"
T		6	12th	23	12th	40	26th	57	28th	74	6th	91	12th
U		7	4th	24	27th	41	20th	58	25th	75	3rd	92	17th
V	8th	8	13th	25	25th	42	2nd	59	18th	76	9th	93	18th
W		9	7th	26	17th	43	7th	60	23rd	77	6th	94	"
X		10	17th	27	16th	44	13th	61	14th	78	11th	95	"
Y	21st	11	1st	28	9th	45	20th	62	3rd	79	6th	96	19th
Z		12	25th	29	19th	46	10th	63	5th	80	1st	97	"
		13	17th	30	10th	47	27th	64	"	81	5th	98	1st
		14	4th	31	25th	48	26th	65	3rd	82	13th	99	20th
		15	26th	32	22nd	49	12th	66	4th	83	11th	100	23rd
		16	7th	33	"	50	24th	67	"	84	"		
		17	"	34	16th	51	10th	68	14th	85	"		

Light Brigades, Royal Artillery.

Brig.	H.-Q. and Batteries.	—	Brig.	H.-Q. and Batteries.	—
I.	H.-Q., 6, 8, 10	Egypt	IV.	G.-Q., 15, 20, 21	Independent Bde. (China) (for Aldershot)
II.	H.-Q., 5, 7, 9	Bulford	V.	H.-Q., 1, 13, 14	Ewshott
III.	H.-Q., 16, 18, 19	Aldershot (for Norwich)			

Indian Mountain Brigades, Royal Artillery.

Brig.	H.-Q. and British Light Batteries.	—	Brig.	H.-Q. and British Light Batteries.	—
20th	H.-Q. 4 (How.)	Quetta	23rd	H.-Q. 17 (How.)	Razmak
21st	H.-Q. 12 (How.)	Jutog Shanghai De- fence Force	24th	H.-Q. 11 (How.)	Peshawar Kalabagh
22nd	H.-Q. 3 (How.)	Abbottabad Bara Gall	25th	H.-Q. 2 (How.)	Kohat Khyra Gali

Medium Brigades, Royal Artillery.

Brig.	H.-Q. and Batteries.	—	Brig.	H.-Q. and Batteries.	—
1st	H.Q. 1, 3 (H) 5 (H) 22 (H)	Larkhill	4th	H.Q., 9 13 (H) (HD) 14 (H) 16 (H)	Muttra Agra Delhi Muttra
2nd	H.Q., 7 (H) 4 (H) 8 (H), 12	Malta (for Shoe- buryness) Gibraltar (for Shoeburyness)	5th	H.Q., 17 21 (H) 15 (H) 20 (H)	Ambala Peshawar Ferozepore Fort Brockhurst
3rd	H.Q., 2, 10 (H) 11 (H) 6 (H)	Shoeburyness (for Longmoor) Ipswich (for Longmoor)	6th	H.Q., 19 (H) 24 (H) 18 23 (H)	Christchurch Fort Fareham Clarence Bar- racks, Ports- mouth
			7th	H.Q. 25, 26 (H), 27 (H), 28 (H)	

Heavy Brigade, Royal Artillery.

Brigade.	H.Q. and Batterys.	—
1st	H.Q. 3, 5, 16, 28.	Plymouth.

Heavy Batteries, Royal Artillery.

Bat-tery.	—	Bat-tery.	—	Bat-tery.	—
1	(Cadre) Clarence Bar- racks, Portsmouth	12	Hong Kong	24	(Cadre) Plymouth
2	(Cadre) Jamaica	13	Karachi	25	Mauritius
4	Gibraltar	14	Bombay	26	Spike Island
6	Malta	15	Sierra Leone	27	Gibraltar
7	Aden	17	Lough Swilly	29	Gibraltar
8	(Cadre) Culver (I. of W.)	18	Ceylon	30	(Cadre) Sheerness
9	Aden	19	Bere Island	31	Hong Kong
10	Malta	20	Hong Kong	32	Spike Island
11	Singapore	21	Shoeburyness	33	Fort Carlisle
		22	Singapore	34	Ceylon
		23	Bombay		

Anti-Aircraft Brigade, Royal Artillery.

Brigade.	H.Q. and Btys.	—	Brigade.	H.Q. and Btys.	—
1st	H.Q. 1, 2, 3	Blackdown	2nd	H.Q. 4, 6 5	Clarence Bks. Portsmouth Biggin Hill

Survey Co., Royal Artillery Larkhill

C.—Royal Engineers

Stations of the Head Quarters of Units.

School of Military Engineering, R.E.

Depôt, Chatham.

Electric Light School, Gosport

Training Battalion, R.E., Chatham

Depôt Battalion, R.E., Chatham

R.E. Mounted Depôt, Aldershot

Railway Training Centre, Longmoor

Rhine Railway Co., Rhine

1st Field Squadron, Aldershot

1st (Fortress) Co., Gibraltar

2nd (Field) Co., Egypt

3rd (Fortress) Co., Dover

4th (Fortress) Co., Gosport

5th (Field) Co., Aldershot

6th (Field) Park Co., Aldershot

7th (Field) Co., Rhine

8th (Railway) Co., Longmoor

9th (Field) Co., Shorncliffe

10th (Railway) Co., Longmoor

11th (Field) Co., Aldershot

12th (Field) Co., Aldershot

13th (Survey) Co., York

14th (Survey) Co., Edinburgh

15th (Field Park) Co., Aldershot

16th (Fortress) Co., Paull-on-Humber

17th (Field) Co., Bulford

18th (Field Park) Co., Shorncliffe

19th (Survey) Co., Southampton

22nd (Fortress) Co., Gosport

23rd (Field) Co., Aldershot

24th (Fortress) Co., Malta

26th (Field) Co., Bordon

27th (Fortress) Co., Bermuda

30th (Fortress) Co., Plymouth

31st (Fortress) Co., Ceylon

33rd (Fortress) Co., Queenstown Har-
bour

34th (Fortress) Co., Guernsey

35th (Fortress) Co., Pembroke

36th (Fortress) Co., Sierra Leone

38th (Field) Co., Aldershot

39th (Fortress) Co., Sheerness

40th (Fortress) Co., Hong Kong

41st (Fortress) Co., Singapore

42nd (Field) Co., Egypt

43rd (Fortress) Co., Mauritius

44th (Fortress) Co., Jamaica

45th (Fortress) Co., Portsmouth

49th (Fortress) Co., North Queens-
54th (Field) Co., Bulford [ferry]

55th (Field) Co., Catterick

56th (Field) Co., Independent Bde.

58th (Porton) Co., Porton [(China)]

59th (Field) Co., Catterick

Experimental Bridging Estab., Christ-
church1st A.A. Searchlight Bn. R.E., Black-
down

D.—Royal Corps of Signals**Stations of the Head Quarters of Units.**

School of Signals, Catterick
 Dépôt Bn. R. Signals, Catterick
 Training Bn. R. Signals, Catterick
 Signals Experimental Estab., Woolwich
 "A" Corps Signals, Ewshott
 1st Cavalry Divisional Signals
 "D" Troop, Cavalry Divisional Signals,
 Aldershot
 "E" Troop, Cavalry Divisional Signals,
 Tidworth
 1st Divisional Signals, Aldershot
 2nd Divisional Signals, Aldershot
 3rd Divisional Signals, Bulford
 4th Divisional Signals, Colchester
 No. 1 Anti-Aircraft Signal Co., Black-
 down
 No. 1 (Med. Art.) Signal Section,
 Colchester
 No. 2 (Med. Art.) Signal Section,
 Larkhill
 No. 1 (Field Art.) Signal Section, New-
 castle-on-Tyne
 No. 2 (Field Art.) Signal Section,
 Edinburgh
 Aldershot Command Signal Co., Alder-
 shot
 Eastern Command Signal Co., London

Northern Command Signal Co., York
 Scottish Command Signal Co., Edin-
 burgh
 Southern Command Signal Co., Salis-
 bury
 Western Command Signal Co., Chester
 North Ireland Signal Co., Belfast
 South Ireland Signal Section, Spike
 Island
 Rhine Command Signal Co., Wiesbaden
 Rhine Field Signal Co., Wiesbaden
 No. 1 Co., Egypt Signals, Egypt
 No. 3 Co. Egypt Signals, Egypt
 No. 2 Wireless Co., Sarafand
 Signal Section, Iraq
 Signal Section, Gibraltar
 Signal Section, Malta
 Signal Section, Malaya
 Signal Section, Hong Kong
 Signal Section, North China
 Signal Section, Mauritius
 Signal Section, Bermuda
 Signal Section, Jamaica
 Signal Section, Sierra Leone
 Signal Section, Ceylon
 "L" Co., Simla

E.—Infantry Regiments

Regiment.	Location.	Commanding Officer.	Remarks.
1st Grenadier Guards	Chelsea	Lt.-Col. E. J. L. Pike, M.C., <i>p.s.c.</i>	
2nd ditto	Windsor	Lt.-Col. L. M. Greg- son, O.B.E.	
3rd ditto	Chelsea	Lt.-Col. M. E. Makgill- Crichton - Maitland, D.S.O.	
1st Coldstream Guards	Tower of London	Lt.-Col. E. D. H. Tolle- mache, D.S.O., M.C., <i>p.s.c.</i>	
2nd ditto	Shanghai Defence Force	Lt.-Col. P. R. B. Law- rence, M.C.	
3rd ditto	Aldershot	Lt.-Col. J. C. Brand, D.S.O., M.C.	
1st Scots Guards	Wellington Bar- racks	Lt.-Col. G. H. Loder, M.C.	
2nd ditto	Independent Bde. (China)	Lt.-Col. Sir V. A. F. Mackenzie, Bart., D.S.O., M.V.O.	
1st Irish Guards	Wellington Bar- racks	Lt.-Col. R. V. Pollok, C.B.E., D.S.O.	
1st Welsh Guards	Aldershot	Lt.-Col. R. E. K. Lea- tham, D.S.O.	
1st Royal Scots	The Royal Regt. } Glasgow	Lt.-Col. N. K. Charteris, C.M.G., D.S.O., <i>p.s.c.</i>	
2nd ditto		Lt.-Col. F. C. Tanner, C.M.G., D.S.O., <i>p.s.c.</i>	

Infantry Regiments—*continued*

Regiment.	Location.	Commanding Officer.	Remarks.
1st The Queen's Royal Regiment (West Surrey)	Independent Bde. (China)	Lt.-Col. R. G. Clarke, C.M.G., D.S.O.	
2nd ditto	Khartoum	Lt.-Col. J. Rainsford-Hannay, D.S.O.	
1st The Buffs (East Kent Regt.)	Bareilly	Lt.-Col. H. L. Smith	
2nd ditto	Aldershot	Bt.-Col. L. W. Lucas, D.S.O., M.C.	
1st The King's Own Royal Regiment (Lancaster)	Aldershot	Lt.-Col. H. A. Kaulbach, O.B.E.	
2nd ditto	Rawal Pindi	Lt.-Col. C. W. Grover	
1st Northumberland Fusiliers	Ballykinlar	Lt.-Col. W. N. Herbert, C.M.G., D.S.O., <i>p.s.c.</i>	
2nd ditto	Cherat	Lt.-Col. S. H. Kershaw, D.S.O., <i>p.s.c.</i>	
1st Royal Warwickshire Regiment	Shorncliffe	Lt.-Col. C. R. Macdonald, C.M.G., <i>p.s.c.</i>	
2nd ditto	Delhi	Lt.-Col. C. T. Tomes, D.S.O., M.C., <i>p.s.c.</i>	
1st Royal Fusiliers (City of London Regiment)	Kasauli	Lt.-Col. F. Moore, D.S.O., O.B.E.	
2nd ditto	Rhine	Lt.-Col. G. A. Stevens, C.M.G., D.S.O.	
1st The King's Regiment (Liverpool)	Malta	Lt.-Col. G. L. Oliver	
2nd ditto	Lichfield	Bt.-Col. L. R. Schuster, D.S.O., <i>p.s.c.</i>	
1st Norfolk Regiment	Egypt	Lt.-Col. J. P. L. Mostyn	
2nd ditto	Aldershot	Lt.-Col. S. J. P. Scobell, C.M.G., D.S.O., <i>p.s.c.</i>	
1st Lincolnshire Regiment	Aldershot	Lt.-Col. F. S. Thackeray, D.S.O., M.C.	
2nd ditto	Lucknow	Lt.-Col. A. B. Johnson, D.S.O.	
1st Devonshire Regiment	Shanghai Defence Force	Lt.-Col. W. E. Scafe, C.M.G., D.S.O., <i>p.s.c.</i>	
2nd ditto	Devonport	Lt.-Col. E. Hewlett, C.M.G., O.B.E.	
1st Suffolk Regiment	Colchester	Lt.-Col. W. N. Nicholson, C.M.G., D.S.O., <i>p.s.c.</i>	
2nd ditto	Shanghai Defence Force	Lt.-Col. F. S. Cooper, D.S.O.	
1st The Somerset Light Infantry (Prince Albert's)	Egypt and Cyprus	Lt.-Col. J. S. N. Harrison, D.S.O.	
2nd ditto	Tidworth	Lt.-Col. H. I. R. Allfrey, D.S.O., M.C.	
1st The West Yorkshire Regiment (The Prince of Wales's Own)	Holywood	Lt.-Col. A. M. Boyall, D.S.O.	
2nd ditto	Mhow and Jhansi	Lt.-Col. A. A. W. Spencer	

Infantry Regiments—continued

Regiment.	Location.	Commanding Officer.	Remarks.
1st East Yorkshire Regiment	Tientsin	Lt.-Col. J. McD. Haskard, C.M.G., D.S.O., <i>p.s.c.</i>	
2nd ditto	Aldershot	Lt.-Col. W. G. Geddes, D.S.O.	
1st Bedfordshire and Hertfordshire Regt.	Shanghai Defence Force	Lt.-Col. J. P. Tredennick, D.S.O., O.B.E., <i>p.s.c.</i>	
2nd ditto	Dover	Lt.-Col. W. R. H. Dann, D.S.O.	
1st Leicestershire Regiment	Egypt	Lt.-Col. C. S. Davies, C.M.G., D.S.O.	
2nd ditto	Colchester	Lt.-Col. W. T. Bromfield	
1st The Green Howards (Alexandra Princess of Wales's Own Yorkshire Regiment)	Shanghai Defence Force	Lt.-Col. H. W. McCall, C.M.G., D.S.O.	
2nd ditto	Jamaica and Bermuda	Lt.-Col. C. H. de St. P. Bunbury	
1st Lancashire Fusiliers	Dover	Lt.-Col. A. H. Spooner, C.M.G., D.S.O.	
2nd ditto	Madras and St. Thomas Mount	Lt.-Col. W. J. Woodcock, D.S.O.	
1st Royal Scots Fusiliers	Portsmouth	Lt.-Col. C. H. I. Jackson, D.S.O.	
2nd ditto	Ferozepore and Amritsar	Bt.-Col. R. G. Crauford, D.S.O., <i>p.s.c.</i>	
1st Cheshire Regiment	Poona and Kirkee	Lt.-Col. H. S. Adair, D.S.O.	
2nd ditto	Tidworth	Lt.-Col. E. G. Hamilton, C.M.G., D.S.O., M.C.	
1st Royal Welch Fusiliers	Nasirabad	Lt.-Col. H. V. V. Kyrke, D.S.O.	
2nd ditto	Rhine	Bt.-Col. C. I. Stockwell, C.B., C.M.G., D.S.O., <i>p.s.c.</i>	
1st South Wales Borderers	Lichfield	Lt.-Col. L. H. Tudor, O.B.E.	
2nd ditto	Agra	Lt.-Col. T. C. Greenway, D.S.O.	
1st King's Own Scottish Borderers	Bordon	Lt.-Col. W. T. Wilkinson, D.S.O.	
2nd ditto	Hong Kong	Lt.-Col. L. J. Comyn, C.M.G., D.S.O., <i>p.s.c.</i>	
1st The Cameronians (Scottish Rifles)	Shanghai Defence Force	Lt.-Col. E. B. Ferrers, D.S.O.	
2nd ditto	Quetta	Lt.-Col. A. R. MacAllen	
1st Royal Inniskilling Fusiliers	Shorncliffe	Lt.-Col. R. C. Smythe, C.M.G., D.S.O.	
1st Gloucestershire Regiment	Portland	Lt.-Col. J. Fane, D.S.O.	
2nd ditto	Jhansi	Lt.-Col. R. L. Beasley, D.S.O.	
1st Worcestershire Regiment	Allahabad	Lt.-Col. D. F. O. Faviell, D.S.O.	
2nd ditto	Rhine	Lt.-Col. F. P. Dunlop, C.B.E., D.S.O.	

Infantry Regiments—*continued*

Regiment.	Location.	Commanding Officer.	Remarks.
1st East Lancashire Regiment and ditto	Quetta Pembroke Dock	Lt.-Col. W. J. Cranston, D.S.O. Lt.-Col. J. H. L. Poé, D.S.O.	
1st East Surrey Regiment and ditto	Kuldana Gibraltar	Lt.-Col. F. S. Montague - Bates, C.B., C.M.G., D.S.O. Lt.-Col. M. J. Minoque, D.S.O., M.C.	
1st The Duke of Cornwall's Light Infantry and ditto	Lucknow Guernsey	Lt.-Col. A. P. Dene, C.M.G., D.S.O. Lt.-Col. H. T. Dobbin, C.B.E., D.S.O.	
1st The Duke of Wellington's Regiment (West Riding) and ditto	Gosport Singapore	Lt.-Col. F. H. B. Wellesley. Lt.-Col. C. J. Pickering, C.M.G., D.S.O., <i>p.s.c.</i>	
1st Border Regiment and ditto	Shanghai Defence Force North China Command	Lt.-Col. E. Roach-Kelly, D.S.O. Lt.-Col. A. J. Ellis, D.S.O., <i>p.s.c.</i>	
1st Royal Sussex Regiment and ditto	Bordon Charial	Lt.-Col. C. E. Bond, C.M.G., D.S.O. Lt.-Col. J. S. Woodruffe, D.S.O., O.B.E.	
1st Hampshire Regiment and ditto	Jubbulpore Plymouth	Lt.-Col. R. S. Allen, D.S.O., <i>p.s.c.</i> Lt.-Col. L. C. Morley, C.B.E.	
1st South Staffordshire Regiment and ditto	Bombay and Deolali Shorncliffe	Bt.-Col. J. R. M. Minshull-Ford, D.S.O., M.C. Lt.-Col. P. R. C. Comings, C.M.G., D.S.O., <i>p.s.c.</i>	
1st Dorsetshire Regt. and ditto	Meerut Aldershot	Lt.-Col. G. M. Herbert, D.S.O. Lt.-Col. J. F. Badham, D.S.O.	
1st The Prince of Wales's Volunteers (South Lancashire) and ditto	Tidworth Lebong and Barrackpore	Lt.-Col. G. C. Kelly, D.S.O., <i>p.s.c.</i> Lt.-Col. B. Evans	
1st Welch Regiment and ditto	Aden Independent Bde. (China)	Lt.-Col. G. Fleming, D.S.O. Lt.-Col. T. G. Mathias, D.S.O.	
1st The Black Watch (Royal Highlanders) and ditto	Dalhousie Fort George	Lt.-Col. R. A. Bulloch, D.S.O. Lt.-Col. L. P. Evans, V.C., C.M.G., D.S.O., <i>p.s.c.</i>	
1st Oxfordshire and Buckinghamshire Light Infantry	Rhine	Bt.-Col. A. G. Bayley, C.B.E., D.S.O., <i>p.s.c.</i>	

Infantry Regiments—*continued*

Regiment.	Location.	Commanding Officer.	Remarks.
2nd Oxfordshire and Buckinghamshire Light Infantry	Chakrata	Lt.-Col. W. H. M. Freestun, C.M.G., D.S.O.	
1st Essex Regiment	Colchester	Lt.-Col. A. B. Incledon-Webber, C.M.G., D.S.O.	
2nd ditto	Cawnpore and Benares	Lt.-Col. C. R. Roberts-West	
1st The Sherwood Foresters (Nottinghamshire and Derbyshire Regiment)	Londonderry	Lt.-Col. K. C. Weldon, D.S.O.	
2nd ditto	Karachi	Lt.-Col. R. S. Hart, D.S.O.	
1st The Loyal Regiment (North Lancashire)	Secunderabad	Lt.-Col. F. W. Greenhill, O.B.E.	
2nd ditto	Gravesend	Lt.-Col. W. P. H. Hill, C.M.G., D.S.O., <i>p.s.c.</i>	
1st Northamptonshire Regiment	Independent Bde. (China)	Lt.-Col. S. H. J. Thunders, C.M.G., D.S.O., M.C.	
2nd ditto	Khartoum	Lt.-Col. G. L. Crossman, C.M.G., D.S.O.	
1st The Royal Berkshire Regiment (Princess Charlotte of Wales's)	Fyzabad	Lt.-Col. A. E. F. Harris, D.S.O.	
2nd ditto	Rhine	Lt.-Col. F. H. Moore, C.B.E., D.S.O., <i>p.s.c.</i>	
1st Queen's Own Royal West Kent	Madras	Lt.-Col. A. K. Grant, D.S.O.	
2nd ditto [Regiment]	Woking	Lt.-Col. J. T. Twisleton-Wykeham-Fiennes	
1st King's Own Yorkshire Light Infantry	Dover	Lt.-Col. H. W. B. Thorp, D.S.O., <i>p.s.c.</i>	
2nd ditto	Peshawar	Lt.-Col. H. Mallinson, D.S.O.	
1st King's Shropshire Light Infantry	Dinapore	Lt.-Col. B. E. Murray, D.S.O.	
2nd ditto	Rhine	Lt.-Col. J. C. Hooper, D.S.O.	
1st Middlesex Regiment (Duke of Cambridge's Own)	North China Command	Lt.-Col. W. A. Stewart, O.B.E.	
2nd ditto	Ahmednagar	H. P. F. Bicknell, D.S.O.	
1st King's Royal Rifles Corps	Razmak	Lt.-Col. F. G. Willan, C.M.G., D.S.O.	
2nd ditto	Aldershot	Lt.-Col. C. A. Howard, D.S.O.	
1st Wiltshire Regiment (Duke of Edinburgh's)	Plymouth	Lt.-Col. F. H. Danaey, C.M.G., D.S.O.	
2nd ditto	Kamptee and Nagpur	Lt.-Col. C. A. Barker, O.B.E.	
1st Manchester Regiment	Rhine	Lt.-Col. C. C. Stapledon	
2nd ditto	Rangoon	Lt.-Col. J. R. Heelis, M.C.	

Infantry Regiments—*continued*

Regiment.	Location.	Commanding Officer.	Remarks.
1st North Staffordshire Regiment (The Prince of Wales's)	Calcutta	Lt.-Col. H. V. R. Hodson, D.S.O.	
2nd ditto	Blackdown	Bt.-Col. F. C. T. Ewald, D.S.O.	
1st York & Lancaster Regiment	Bordon	Lt.-Col. T. W. Parkinson, D.S.O.	
2nd ditto	Jullundur	Lt.-Col. M. G. H. Barker, D.S.O., <i>p.s.c.</i>	
1st Durham Light Infantry	Belfast	Lt.-Col. C. L. Matthews, D.S.O.	
2nd ditto	Sialkot	Lt.-Col. R. T. Lee, C.M.G., O.B.E., <i>p.s.c.</i>	
1st Highland Light Infantry (City of Glasgow Regt.)	Aldershot	Lt.-Col. T. A. Pollok-Morris, O.B.E., <i>p.s.c.</i>	
2nd ditto	Bangalore	Lt.-Col. W. H. E. Segrave, D.S.O., <i>p.s.c.</i>	
1st Seaforth Highlanders (Ross-shire), Buffs (The Duke of Albany's)	Aldershot	Lt.-Col. V. M. Fortune, D.S.O., <i>p.s.c.</i>	
2nd ditto	Lahore	Lt.-Col. J. O. Hopkinson, D.S.O., M.C.	
1st Gordon Highldrs.	Secunderabad	Lt.-Col. I. Picton-Warlow	
2nd ditto	Bordon	Lt.-Col. J. Forbes-Robertson, V.C., D.S.O., M.C.	
1st The Queen's Own Cameron Highlanders	Maymyo	Lt.-Col. R. Campbell, D.S.O.	
2nd ditto	Edinburgh	Lt.-Col. J. S. Drew, D.S.O., M.C., <i>p.s.c.</i>	
1st Bn. The Royal Ulster Rifles	Aldershot	Lt.-Col. D. T. C. K. Bernard, C.M.G., D.S.O., <i>p.s.c.</i>	
2nd ditto	Poona	Lt.-Col. H. R. Goodman, D.S.O.	
Royal Irish Fusiliers (Princess Victoria's)	Egypt	Lt.-Col. F. W. E. Johnson, D.S.O.	
1st Argyll and Sutherland Highlanders (Princess Louise's)	Egypt	Lt.-Col. A. W. R. Sprot	
2nd ditto	Parkhurst	Lt.-Col. C. P. James, D.S.O.	
1st Rifle Brigade (Prince Consort's Own)	Landi Kotal	Lt.-Col. H. M. Wilson, D.S.O., <i>p.s.c.</i>	
2nd ditto	Colchester	Lt.-Col. F. H. Burnett-Nugent, D.S.O., O.B.E.	

F. ROYAL TANK CORPS

Headquarters Royal Tank Corps Centre	..	Wool.
Col. Comdt. K. M. Laird, D.S.O., <i>p.s.c.</i>		
Depôt	..	Wool, Dorset.
Lieut.-Col. H. D. Carlton, D.S.O.		
2nd Battalion	..	Farnborough.
Lt.-Col. J. M. Hutton, C.B.E., D.S.O.		
3rd Battalion (less 1 Section)	..	Lydd.
Lieut.-Col. F. A. Pile, D.S.O., M.C., <i>p.s.c.</i>		
4th Battalion	..	Catterick.
Lieut.-Col. M. C. Festing, D.S.O., <i>p.s.c.</i>		
5th Battalion	..	Perham Down, Salisbury Plain.
Lieut.-Col. N. H. Stone.		
1 Section, 3rd Battalion	..	Cairo.
1 Section, 12th Armoured Car Company	..	Rhine.
Central Schools	..	Wool.
Lt.-Col. E. J. Carter.		
1st Armoured Car Company	..	Quetta (for Waziristan).
2nd	..	Bangalore.
3rd	..	Cairo.
5th	..	Shanghai Defence Force.
6th	..	Parachinar & Peshawar.
7th	..	Lahore.
8th	..	Kirkee.
9th	..	Cawnpore & Calcutta.
10th	..	Delhi (for Quetta).
11th	..	Razmak (for Delhi).
12th	(Less 1 Section)	Bovington.

II. THE ARMY IN INDIA

[Corrected up to the 1st of August, 1927.]

Army Headquarters*Commander-in-Chief*

Commander-in-Chief. Field-Marshal Sir William R. Birdwood, Bart.,
G.C.B., G.C.M.G., K.C.S.I., C.I.E., D.S.O.,
I.A.

Military Secretary's Branch

Military Secretary. Major-General J. F. S. D. Coleridge, C.B., C.M.G.,
D.S.O., I.A., *p.s.c.*

General Staff Branch

C.G.S. Lieut.-General Sir A. Skeen, K.C.B., K.C.I.E., C.M.G.,
I.A., *p.s.c.*

D.C.G.S. Major-General W. M. St. G. Kirke, C.B., C.M.G., D.S.O.,
B.S., *p.s.c.*

D.M.O. Colonel (Temp. Col. on the Staff) W. L. O. Twiss, C.B.E.,
M.C., I.A., *p.s.c.*

D.D. (Intell.) Colonel M. Saunders, D.S.O., I.A., *p.s.c.*

D.M.T. Colonel (Temp. Col. on the Staff) H. C. Jackson, C.B., C.M.G.,
D.S.O., B.S., *p.s.c.*

D.D.S.D. Bt.-Colonel K. D. B. Murray, D.S.O., I.A., *p.s.c.*

ATTACHED TO GENERAL STAFF

Major-General, Cavalry. (In abeyance.)

Major-General, Artillery. Major-General W. H. Kay, C.B., D.S.O.,
B.S.

Colonel on the Staff, Bt.-Colonel E. F. J. Hill, D.S.O., M.C., R.E.
Royal Engineers.

Adjutant-General's Branch

A.G. Lieut.-General Sir J. S. M. Shea, K.C.B.,
K.C.M.G., D.S.O., A.D.C., I.A., *p.s.c.*

D.A.G. and D.P.S. Major-General A. Solly-Flood, C.B., C.M.G.,
D.S.O., B.S.

D. of O. Colonel (Temp. Col. on the Staff) M. R. Walsh,
C.M.G., M.C., B.S., *p.s.c.*

Dir. Medl. Services. Major-General W. H. Ogilvie, C.B., C.M.G., M.B.,
K.H.P., I.M.S.

Quartermaster-General's Branch

Q.M.G. Lieut.-Colonel Sir C. J. Deverell, K.B.E., C.B.,
B.S., *p.s.c.*

D.Q.M.G. and Major-General Sir W. S. Leslie, K.B.E., C.B.,
D.M.Q. C.M.G., D.S.O., *p.s.c.*, I.A.

Quartermaster-General's Branch—continued

- Dir. of S. and T.* Major-General H. E. ap Rhys Pryce, C.B., C.M.G., D.S.O., I.A., *p.s.c.*
Dir. of E. and O. S. Colonel (Temp. Col. on the Staff) W. L. J. Carey, C.I.E., B.S.
Dir. Vety. Services in India. Colonel (Temp. Col. on the Staff) F. W. Hunt, C.B., C.M.G., C.B.E., B.S.
Dir. of Remounts. Colonel (Temp. Col. on the Staff) W. H. Anderson, C.B.E., I.A.

Master General of Supply Branch

- Master General.* Major-General Sir E. H. de V. Atkinson, K.B.E., C.B., C.M.G., C.I.E., B.S.
Dir. of Artillery. Colonel (Temp. Col. on the Staff) C. C. Palmer, C.B.E., B.S., *p.s.c.*
Dir. of Contracts. Colonel W. B. Dunlop, D.S.O., O.B.E., I.A.S.C.
Dir. of Farms. Lieut.-Colonel A. S. Marriott, Mily. Farms Dept.
Dir. of Ordnance Factories and Manufacture. Colonel (Temp. Col. on the Staff) G. C. Sturrock, C.B.E., F.I.C., A.I.E. (Ind.), B.S.

Engineer-in-Chief's Branch

- Engineer-in-Chief.* Major-General R. N. Harvey, C.B., C.M.G., D.S.O., B.S.

Northern Command

(RAWALPINDI)

- G.O.C.-in-Chief.* General Sir Alexander S. Cobbe, V.C., K.C.B., K.C.S.I., D.S.O., I.A., *p.s.c.*
Colonel on the Staff, General Staff. Colonel (Temp. Col. on the Staff) R. J. T. Hildyard, C.M.G., D.S.O., B.S., *p.s.c.*
D.A. and Q.M.G. Major-General R. S. St. John, C.I.E., D.S.O., I.A., *p.s.c.*

Peshawar District

(PESHAWAR)

- Commander.* Major-General Sir R. A. Cassels, K.C.B., C.S.I., D.S.O., I.A., *p.s.c.*

1ST (RISALPUR) CAVALRY BRIGADE

(Risalpur)

- Brigade Commander.* Colonel (Temp. Col. Commandant) W. G. K. Green, C.B., C.M.G., D.S.O., I.A.

LANDIKOTAL BRIGADE

(Landikotal)

- Brigade Commander.* Colonel (Temp. Col. Commandant) C. A. Milward, C.I.E., C.B.E., D.S.O., A.D.C., I.A.

PESHAWAR BRIGADE

(Peshawar)

- Brigade Commander.* Colonel (Temp. Col. Commandant) C. F. Watson, C.M.G., D.S.O., B.S.

THE ARMY QUARTERLY

Peshawar District—continued

HEADQUARTERS, NOWSHERA BRIGADE

(Nowshera)

Brigade Commander. Colonel (Temp. Col. Commandant) S. F. Muspratt, C.S.I., C.I.E., D.S.O., I.A., *p.s.c.*

Kohat District

(Kohat)

Commander. Major-General E. A. Fagan, C.B., C.S.I., C.M.G., D.S.O., I.A.

KOHAT BRIGADE

(Kohat)

Brigade Commander. Colonel (Temp. Col. Commandant) C. Kirkpatrick, C.B., C.B.E., I.A.

Rawalpindi District

(Rawalpindi)

Commander. Major-General C. N. Macmullen, C.B., C.M.G., C.I.E., D.S.O., I.A., *p.s.c.*

1ST (ABBOTTABAD) INFANTRY BRIGADE

(Abbottabad)

Brigade Commander. Colonel (Temp. Col. Commandant) J. Whitehead, C.M.G., D.S.O., A.D.C., I.A., *p.s.c.*

2ND (RAWALPINDI) INFANTRY BRIGADE

(Rawalpindi)

Brigade Commander. Colonel (Temp. Col. Commandant) H. L. Knight, C.M.G., D.S.O., B.S., *p.s.c.*

3RD (JHELM) INFANTRY BRIGADE

(Jhelum)

Brigade Commander. Colonel (Temp. Col. Commandant) R. Gardiner, D.S.O., I.A., *p.s.c.*

Lahore District

(LAHORE)

Commander. Major-General Sir H. F. Cooke, K.B.E., C.B., C.S.I., D.S.O., I.A.

2ND (SIALKOT) CAVALRY BRIGADE

(Sialkot)

Brigade Commander. Colonel (Temp. Col. Commandant) C. R. Harbord, C.B., C.M.G., D.S.O., I.A.

Ferozepoore Brigade Area

(Ferozepoore)

Brigade Commander. Col. (Temp. Col. Commandant) R. J. F. Hayter, C.B., C.M.G., D.S.O., B.S., *p.s.c.*

JULLUNDUR BRIGADE AREA

(Jullundur)

Area Commander. Colonel (Temp. Col. Commandant) D. I. Shuttleworth, C.B., C.B.E., D.S.O., I.A., *p.s.c.*

*Lahore Brigade Area**(Lahore)*

Area Commander. Colonel (Temp. Col. Commandant) W. A. Fetherstonhaugh, C.B.E., D.S.O., I.A., *p.s.c.*

AMBALA BRIGADE AREA

(Ambala)

Area Commander. Colonel (Temp. Col. Commandant) D. Deane, C.B., D.S.O., I.A., *p.s.c.*

MULTAN BRIGADE

(Multan)

Area Commander. Colonel (Temp. Col. Commandant) H. S. Moberly, C.B., I.A., *p.s.c.*

*Waziristan District**(RAZMAK)*

Commander. Major-General K. Wigram, C.B., C.S.I., C.B.E., D.S.O., I.A., *p.s.c.*

RAZMAK BRIGADE

(Razmak)

Brigade Commander. Colonel (Temp. Col. Commandant) W. E. Wilson-Johnston, C.B., C.I.E., C.B.E., D.S.O., I.A., *p.s.c.*

BANNU BRIGADE

(Bannu)

Brigade Commander. Colonel (Temp. Col. Commandant) S. B. Pope, D.S.O., *p.s.c.*

MANZAI BRIGADE

(Manzai)

Brigade Commander. Colonel (Temp. Col. Commandant) R. C. Wilson, D.S.O., M.C., I.A., *p.s.c.*

*Western Command**(QUETTA)*

G.O.C.-in Chief.

Colonel on the Staff, General Staff. Colonel (Temp. Colonel on the Staff) B. R. Moberly, D.S.O., I.A., *p.s.c.*

D.A. and Q.M.G. Colonel (Temp. Colonel on the Staff) A. J. G. Moir, C.B.E., D.S.O., B.S., *p.s.c.*

ZHOB INDEPENDENT BRIGADE AREA

(Loralai)

Area Commander. Colonel (Temp. Col. Commandant) C. L. Porter, C.B., C.M.G., D.S.O., B.S.

Baluchistan District

(QUETTA)

Commander. Major-General J. W. O'Dowda, C.B., C.S.I.,
C.M.G., B.S., *p.s.c.*

4TH (QUETTA) INFANTRY BRIGADE

(Quetta)

Brigade Commander. Colonel (Temp. Col. Commandant) E. C.
Alexander, C.I.E., D.S.O., I.A., *p.s.c.*

5TH (QUETTA) INFANTRY BRIGADE

(Quetta)

Brigade Commander. Colonel (Temp. Col. Commandant) F. W. Ramsay,
C.B., C.M.G., D.S.O., B.S.

Sind (Independent) Brigade Area

(KARACHI)

Commander. Major-General M. R. W. Nightingale, C.B.,
C.M.G., C.I.E., D.S.O., I.A.

Eastern Command

(Naini Tal)

G.O.C.-in-Chief. General Sir G. de S. Barrow, K.C.B., K.C.M.G.,
A.D.C., I.A., *p.s.c.*

Colonel on the Staff, Colonel (Temp. Col. on the Staff) L. F.
General Staff. Renny, C.M.G., D.S.O., B.S., *p.s.c.*

D.A. and Q.M.G. Colonel (Temp. Col. on the Staff) W. M. Ford-
ham, C.B.E., I.A., *p.s.c.*

Meerut District

(Meerut)

Commander. Major-General Sir G. McK. Franks, K.C.B., B.S.,
p.s.c.

3RD (MEERUT) CAVALRY BRIGADE

(Meerut)

Brigade Commander. Colonel (Temp. Col. Commandant) E. D. Giles,
C.M.G., D.S.O., I.A.

7TH (DEHRA DUN) INFANTRY BRIGADE

(Dehra Dun)

Brigade Commander. Colonel (Temp. Col. Commandant) C. R. Brad-
shaw, C.B., C.B.E., I.A., *p.s.c.*

8TH (BAREILLY) INFANTRY BRIGADE

(Bareilly)

Brigade Commander. Colonel (Temp. Col. Commandant) G. C. Williams,
C.M.G., D.S.O., B.S., *p.s.c.*

Meerut District—continued

JHANSI BRIGADE AREA (TEMPORARY)

(Jhansi)

Area Commander. Colonel (Temp. Col. Commandant) C. T. Morris,
C.B.E., I.A.

Lucknow District

(Lucknow)

G.O.C. Major-General A. B. E. Cator, C.B., D.S.O., B.S.
ALLAHABAD BRIGADE AREA

(Allahabad)

Area Commander. Colonel (Temp. Col. Commandant) E. C. Kennington,
C.B.E., D.S.O., M.C., I.A.

6TH (LUCKNOW) INFANTRY BRIGADE

(Lucknow)

Brigade Commander. Colonel (Temp. Col. Commandant) J. Kennedy,
C.M.G., D.S.O., B.S.

DELHI INDEPENDENT BRIGADE AREA

(Delhi)

Area Commander. Colonel (Temp. Col. Commandant) H. Barstow,
C.B.E., I.A.

Presidency and Assam District

(Calcutta)

Commander. Major-General H. D. O. Ward, C.B., C.M.G.,
B.S.

Southern Command

(Poona)

G.O.C.-in-Chief. Lieut.-General Sir H. B. Walker, K.C.B.,
K.C.M.G., D.S.O., B.S.

Colonel on the Staff, Colonel (Temp. Col. on the Staff) A. W. A. M.
General Staff. Moens, C.B., C.M.G., D.S.O., I.A., *p.s.c.*

D.A. and Q.M.G. Major-General E. F. Orton, C.B., I.A., *p.s.c.*

Central Provinces District

(Mhow)

Commander. Major-General Sir H. C. Holman, K.C.B., C.M.G.,
D.S.O., I.A., *p.s.c.*

10TH (JUBBULPORE) INFANTRY BRIGADE

(Jubbulpore)

Brigade Commander. Colonel (Temp. Col. Commandant) C. J. B. Hay,
C.M.G., C.B.E., D.S.O., I.A., *p.s.c.*

THE ARMY QUARTERLY

*Poona District**(Poona)*

Commander. Major-General Hon. J. F. Gathorne-Hardy, C.B.,
C.M.G., D.S.O., *p.s.c.*

POONA BRIGADE AREA

(Poona)

Area Commander. Colonel (Temp. Col. Commandant) G. S. G.
Craufurd, C.B., C.M.G., C.I.E., D.S.O.,
A.D.C., B.S., *p.s.c.*

4TH (SECUNDERABAD) CAVALRY BRIGADE

(Secunderabad)

Brigade Commander. Colonel (Temp. Col. Commandant) H. A. Tomkin-
son, D.S.O., B.S.

11TH (AHMEDNAGAR) INFANTRY BRIGADE

(Ahmednagar)

Brigade Commander. Colonel (Temp. Col. Commandant) J. C. Simpson,
I.A.

12TH (SECUNDERABAD) INFANTRY BRIGADE

(Secunderabad)

Brigade Commander. Colonel (Temp. Col. Commandant) H. R. Headlam,
C.M.G., D.S.O., B.S., *p.s.c.*

*Bombay District**(Bombay)*

Commander. Major-General E. S. Girdwood, C.B., C.M.G., B.S.

*Madras District**(Bangalore)*

G.O.C. Major-General A. L. Tarver, C.B., C.I.E.,
D.S.O., I.A., *p.s.c.*

SOUTHERN BRIGADE AREA

(Fort St. George, Madras)

Area Commander. Colonel (Temp. Col. Commandant) R. B. Worgan,
C.S.I., C.V.O., D.S.O., I.A.

*Burma Independent District**(Maymyo)*

Commander. Major-General Sir H. C. Tytler, K.C.B., C.M.G.,
C.I.E., D.S.O., I.A.

RANGOON BRIGADE AREA

(Rangoon)

Area Commander. Colonel (Temp. Col. Commandant) R. E. Solly-
Flood, C.M.G., D.S.O., B.S., *p.s.c.*

Aden Independent Brigade

Commander. Major-General Sir J. H. K. Stewart, K.C.B.,
D.S.O., I.A., *p.s.c.*

III. THE ROYAL AIR FORCE

1.—Air Council

<i>President of the Air Council.</i>	Lieut.-Colonel the Rt. Hon. Sir Samuel John Gurney Hoare, Bart., C.M.G., M.P., Secretary of State for Air.
<i>Vice-President of the Air Council.</i>	Major Sir Philip A. G. D. Sassoon, Bt., G.B.E., C.M.G., M.P., Under Secretary of State for Air.
<i>Members.</i>	Marshal of the Royal Air Force Sir H. M. Trenchard, Bt., G.C.B., D.S.O., A.D.C., Chief of the Air Staff; Air Vice-Marshal Sir P. W. Game, K.C.B., D.S.O., <i>p.s.c.</i> , Air Member for Personnel; Air Vice-Marshal Sir J. F. A. Higgins, K.B.E., C.B., D.S.O., A.F.C., Air Member for Supply and Research; Sir W. F. Nicholson, K.C.B., Secretary of the Air Ministry.

2.—Air Ministry

<i>Secretary of State for Air.</i>	Lieut.-Colonel the Rt. Hon. Sir Samuel J. G. Hoare, Bart., C.M.G., M.P.
<i>Under Secretary of State for Air.</i>	Major Sir Philip A. G. D. Sassoon, Bt., G.B.E., C.M.G., M.P.
<i>Secretary of the Air Ministry.</i>	Sir W. F. Nicholson, K.C.B.

Department of the Under Secretary of State for Air

<i>Director of Civil Aviation.</i>	Air Vice-Marshal Sir W. S. Brancker, K.C.B., A.F.C.
------------------------------------	---

Department of the Secretary of the Air Ministry

<i>Secretary.</i>	Sir W. F. Nicholson, K.C.B.
<i>Deputy Secretary.</i>	Sir S. Dannreuther, Kt., C.B.
<i>Principal Assistant Secretaries.</i>	H. W. W. McAnally, Esq., C.B.; B. E. Holloway, Esq., C.B.; J. A. Webster, Esq., C.B., D.S.O.
<i>Director of Accounts.</i>	J. S. Ross, Esq., C.B.E.
<i>Director of Contracts.</i>	C. R. Brigstocke, Esq., C.B.
<i>Director of Meteorological Office.</i>	G. C. Simpson, Esq., C.B., C.B.E., LL.D., D.Sc., F.R.S.

Directorate of Lands (Joint Service for War Office and Air Ministry)

<i>Controller of Lands.</i>	H. G. Goligher, Esq., C.B.E.
-----------------------------	------------------------------

Air Ministry—continued**Department of the Chief of the Air Staff**

<i>Chief of the Air Staff.</i>	Marshal of the Royal Air Force Sir H. M. Trenchard, Bt., G.C.B., D.S.O., A.D.C.
<i>Director of Operations and Intelligence.</i>	Air Commodore C. L. N. Newall, C.M.G., C.B.E., A.M. (Deputy Chief of the Air Staff).
<i>Director of Organization and Staff Duties.</i>	Air Vice-Marshal Sir I. L. B. Vesey, K.B.E., C.B., C.M.G., D.S.O., <i>p.s.c.</i>
<i>Signals.</i>	Air Commodore L. F. Blandy, C.B., D.S.O.
<i>Director of Works and Buildings.</i>	Major-General Sir W. A. Liddell, K.C.M.G., C.B.

Department of the Air Member for Personnel

<i>Air Member for Personnel.</i>	Air Vice-Marshal Sir P. W. Game, K.C.B., D.S.O., <i>p.s.c.</i>
<i>Director of Personal Services.</i>	Air Commodore A. E. Borton, C.B., C.M.G., D.S.O., A.F.C.
<i>Director of Training.</i>	Air Commodore H. C. T. Dowding, C.M.G., <i>p.s.c.</i>

Department of the Air Member for Supply and Research

<i>Air Member for Supply and Research.</i>	Air Vice-Marshal Sir J. F. A. Higgins, K.B.E., C.B., D.S.O., A.F.C.
<i>Director of Technical Development.</i>	Air Commodore J. L. Forbes, O.B.E.
<i>Director of Scientific Research.</i>	H. E. Wimperis, Esq., O.B.E., M.A., F.R.Ae.S., M.I.E.E.
<i>Director of Airship Development.</i>	Group Captain P. F. M. Fellowes, D.S.O.
<i>Director of Equipment.</i>	Air Commodore A. M. Longmore, C.B., D.S.O., <i>q.s.</i>

3.—R.A.F. Commands (United Kingdom)**AIR DEFENCES OF GREAT BRITAIN**

Headquarters : Hillingdon House, Uxbridge, Middlesex.

<i>Air Officer Commanding-in-Chief.</i>	Air Marshal Sir John M. Salmond, K.C.B., C.M.G., C.V.O., D.S.O., A.D.C.
<i>Air Staff Duties.</i>	Air Commodore F. V. Holt, C.M.G., D.S.O., <i>q.s.</i>

Wessex Bombing Area

Headquarters : Andover.

Station H.Q.	Andover.	No. 39 (Bomb.)	
No. 12 (Bomb.) Sqdn.	Andover.	Sqdn.	Spittlegate.
Staff College	Andover.	Station H.Q. . . .	Bircham Newton.
No. 7 (Bomb.) Sqdn.	Worthy Down.	No. 99 (Bomb.)	
No. 58 (Bomb.) Sqdn.	Worthy Down.	Sqdn.	Bircham Newton.
No. 11 (Bomb.) Sqdn.	Netheravon.	No. 9 (Bomb.)	
Station H.Q.	Spittlegate.	Sqdn.	Manston.
No. 100 (Bomb.)		No. 207 (Bomb.)	
Sqdn	Spittlegate.	Sqdn.	Eastchurch.

R.A.F. Commands (United Kingdom)—continued**Fighting Area***Headquarters : Uxbridge.*

Station H.Q.	Kenley.	No. 17 (Fighter) Sqdn. . .	Upavon.
No. 32 (Fighter) Sqdn. . .	Kenley.	Station H.Q.	Duxford.
No. 23 (Fighter) Sqdn. . .	Kenley.	No. 19 (Fighter) Sqdn. . .	Duxford.
No. 56 (Fighter) Sqdn. . .	Biggin Hill	No. 29 (Fighter) Sqdn. . .	Duxford.
Night Flying Flight . . .	Biggin Hill.	No. 111 (Fighter) Sqdn. . .	Duxford.
Station H.Q.	Northolt.	Station Flight	Duxford.
*No. 24 (Commn.) Sqdn. . .	Northolt.	No. 3 (Fighter)	Upavon.
No. 41 (Fighter) Sqdn. . .	Northolt.	No. 1 (Fighter) Sqdn. . .	Tangmere.
Communication Flight . .	Northolt.	No. 43 (Fighter) Sqdn. . .	Tangmere.
No. 25 (Fighter) Sqdn. . .	Hawkinge.		

No. 1 Air Defence Group*Headquarters : Sloane Square, London, S.W.1.**Auxiliary Air Force Units.*

No. 502 (Ulster) (Bomb).		No. 600 City of London	
Sqdn.	Aldergrove.	(Bomb.) Sqdn.	Hendon.
No. 503 (Bomb.) Sqdn. . .	Waddington.	No. 601 County of London	
		(Bomb.) Sqdn.	Hendon.
		No. 602 City of Glasgow	
		(Bomb.) Sqdn.	Renfrew.
		No. 603 City of Edinburgh	
		(Bomb.) Sqdn.	Turnhouse.
		No. 605 County of Warwick	
		(Bomb.) Sqdn.	Castle Bromwich.

INLAND AREA*Headquarters : Bentley Priory, Stanmore, Middlesex.*

<i>Air Officer Commanding.</i>	Air Vice-Marshal C. A. H. Longcroft, C.B., C.M.G., D.S.O., A.F.C.
<i>Chief Staff Officer.</i>	Air Commodore Bertie C. H. Drew, C.M.G., C.B.E., p.s.c.

Units Administered direct by Inland Area Headquarters.

Air Ministry Wireless Section	Air Ministry.	**R.A.F. Central Band.	Uxbridge.
--	---------------	------------------------	-----------

No. 21 Group*Headquarters : West Drayton.*

†Reception Depot . . .	West Drayton.	School of Store Ac-	
†No. 1 Stores Depot . .	Kidbrooke.	counting and Store	
Port Detachment . . .	South Dock,	Keeping	Kidbrooke.
	West India	†Medical Stores Depot	Kidbrooke.
	Dock, E.14.	†No. 2 Stores Depot	Altrincham.

* Directly under Air Ministry for operations.

** Directly under Director of Personal Services, Air Ministry, for technical administration.

† Directly under Director of Training, Air Ministry, for technical administration.

‡ Controlled directly by the Air Ministry as laid down in A.M.W.O. 822/1921.

R.A.F. Commands (United Kingdom)—*continued*Inland Area—*continued*

No. 21 Group

*Record Office ..	Ruislip.	*The Packing Depot	Ascot.
§R.A.F. M.T. Depot	Shrewsbury.	Detachment	Orfordness.
§Home Aircraft Depot	Henlow.	R.A.F. Depot	Uxbridge.
†Aeroplane and Armament Experimental Establishment ..	Martlesham	(Including School of Physical Training.)	
†No. 15 (Bomb.) Sqdn.	Martlesham.	Superintendent,	
†No. 22 (Bomb.) Sqdn.	Martlesham.	R.A.F. Reserve ..	Northolt.
*No. 3 Stores Depot	Milton.	†R.A.F. Officers' Hospital	Uxbridge.
*No. 4 Stores Depot	Ickenham.	Home Communication Flight	Northolt.

No. 22 Group

Headquarters : Farnborough.

School of Photography	Farnborough.	No. 16 (Army Cooperation) Sqdn.	Old Sarum.
*Experimental Section, R.A.E.	Farnborough.	School of Balloon Training	Larkhill.
No. 4 (Army Cooperation) Sqdn.	Farnborough.	No. 13 (Army Cooperation) Sqdn.	Andover.
School of Army Cooperation	Old Sarum.	No. 2 (Army Cooperation) Sqdn.	Manston.

No. 23 Group

Headquarters : " St. Vincents," Grantham.

No. 2 F.T.S.	Digby.	No. 1. F.T.S.	Netheravon.
No. 5 F.T.S.	Sealand.	C.F.S.	Wittering.
Armament and Gunnery School	Eastchurch.	Electrical and Wireless School ..	Flower Down.
School of Technical Training (Men) ..	Manston.	Detachment of E. and W. School accommodated at ..	Worthy Down

COASTAL AREA

Headquarters : 33-34, Tavistock Place, W.C.1.

<i>Air Officer Commanding</i>	Vice Air-Marshal F. R. Scarlett, C.B., D.S.O.
<i>Chief Staff Officer</i>	Group Captain P. H. L. Playfair, M.C.

Units Administered Direct by Coastal Area Headquarters

¶Inspector of Recruiting	4, Henrietta St., W.C.2.	**Central Medical Board	} 3-4, Clement's Inn, W.C.2.
(a) R.A.F. Recruiting Depot	4, Henrietta St., W.C.2.	Specialists Medical Establishment . . .	
**Research Laboratory			

* Controlled directly by the Air Ministry as laid down in A.M.W.O. 822/1921.

† Administered as laid down in A.M.W.O. 33/1926.

‡ Under No. 21 Group for administration only.

§ Directly under Director of Equipment, Air Ministry, for technical administration.

|| Directly under Director of Training, Air Ministry, for technical administration.

¶ Directly under Air Ministry for technical administration.

** Under the D.M.S., Air Ministry, for technical administration (medical).

R.A.F. Commands (United Kingdom)—continued**Coastal Area—continued****Units Administered Direct by Coastal Area Headquarters—continued**

*Marine Aircraft Experimental Establishment	Felixstowe.	(b) No. 404 (Fleet Fighter) Flight.
(a) Flying Boat Development Flight	Felixstowe.	(c) No. 443 (Fleet Reconnaissance) Flight.
R.A.F. Training Base ..	Leuchars.	R.A.F. Station Donibristle.
(a) Headquarters.		(a) No. 405 (Fleet Fighter) Flight.
		R.A.F. units for H.M.S. <i>Furious</i> .

No. 10 Group**Headquarters : Lee-on-Solent**

R.A.F. Base Calshot.	Storage Unit.. .. Tangmere.
(a) Headquarters.	R.A.F. Base Gosport.
(b) No. 480 (Coastal Reconnaissance) Flight.	(a) Headquarters.
(c) H.Q. Training Squadron.	(b) No. 420 (Fleet Spotter) Flight.
(d) Navigation School.	(c) No. 421 (Fleet Spotter) Flight.
(e) Seaplane Training Flight.	(d) No. 461 (Fleet Torpedo) Flight.
(f) Marine Training Section.	(e) No. 462 (Fleet Torpedo) Flight.
School of Naval Co-operation Lee-on-Solent.	(f) Development Flight.
	Care and Maintenance Party Cattewater.

ROYAL AIR FORCE, CRANWELL**Headquarters : Cranwell, Sleaford, Lincs.**

Air Officer Commanding. Air Commodore F. C. Halahan, C.M.G., C.B.E., D.S.O., M.V.O.

Units as follow :—

R.A.F. (Cadet) College.
Band.

R.A.F. Hospital.

ROYAL AIR FORCE, HALTON**Headquarters : Halton House, Halton, Wendover, Bucks.**

Air Officer Commanding. Air Vice-Marshal C. L. Lambe, C.B., C.M.G., D.S.O.

Units as follow :—

No. 1 School of Technical Training
Apprentices Halton.
School of Cookery "
R.A.F. Hospital "
(a) Pathological Laboratory "

* Controlled directly by the Air Ministry, as laid down in A.M.W.O.822/1921.

THE ARMY QUARTERLY

R.A.F. COMMANDS (OVERSEAS)

R.A.F., Middle East

Headquarters : Villa Victoria, Cairo.

Air Officer Commanding. Air Vice-Marshal T. I. Webb-Bowen, C.B.,
C.M.G.
Chief Staff Officer. Air Commodore C. R. Samson, C.M.G.,
D.S.O., A.F.C.

Units Administered Direct by Middle East Command Headquarters.

R.A.F. Dépôt, Middle East	Aboukir.
(a) Meteorological Station	"
(b) Port Detachment	Alexandria.
No. 216 (Bombing) Squadron	Heliopolis.
(a) Meteorological Station	"
No. 4 Flying Training School	Abu Sueir.
(a) Meteorological Station	"
Aden Flight	Aden.
(a) Meteorological Station	"
(b) Detachment	Somaliland.
No. 208 (Army Co-operation) Squadron	Moascar, Ismailia.
No. 47 (Bombing) Squadron	Helwan.
No. 45 (Bombing) Squadron	Heliopolis.

The A.O.C. MIDDLE EAST is responsible for the Administrative Control of
the R.A.F. in TRANSJORDAN and PALESTINE

Headquarters : Amman.

No. 14 (Bombing) Squadron H.Q. and 2 Flights	Amman.
No. 2 Armoured Car Coy. (1 Section)	"
No. 2 Armoured Car Coy. (H.Q. and 2 Sections)	Ramleh.
No. 14 (Bombing) Squadron (1 Flight)	"
Meteorological Station	"
Supply Dépôt	Sarafand.
M/T Repair Section	"
R.A.F. Hospital	"
W/T Station	Jerusalem.

Also the undermentioned military unit:—

No. 2. Wireless Coy., R.C.S.	Sarafand.
------------------------------------	-----------

Iraq Command

Headquarters : Baghdad City.

Air Officer Commanding. Air Vice-Marshal Sir E. L. Ellington,
K.C.B., C.M.G., C.B.E., *p.s.c.*
Chief Staff Officer. Air Commodore T. C. R. Higgins, C.B.,
C.M.G.

R.A.F. COMMANDS (OVERSEAS)—continued**Iraq Command—continued**

R.A.F. Units as follow :—

Administered Direct by Command Headquarters.

Station Headquarters	Hinaiidi.
H.Q. Accountant Office	Baghdad.
Brigade Accountant Office	"
Aircraft Dépôt	Hinaiidi.
Indian Hospital	Karradah.
British Hospital	Hinaiidi.
Central Supply Dépôt	"
Petrol Dump	"
Supply Dépôt	Mosul.
No. 6 (Army Co-operation) Squadron	Mosul.
No. 30 (Bombing) Squadron	Hinaiidi.
" 55 (Bombing) Squadron	"
" 70 (Bombing) Squadron	"
Armoured Car Wing	"

Station Headquarters	Basrah.
Stores Dépôt	"
Base Supply Dépôt	"
Combined Hospital	"
Inland Water Transport	"
No. 84 (Bombing) Squadron	Shaibah.

Military Forces in Iraq.

2/16th Punjab Regt.	Iraq Signal Section.
4/19th Hyderabad Regt.	No. 2 Wireless Coy., R.C.S. (No. 2
63rd Co. Q.V.O. Madras	Section).
Sappers and Miners.	40th Combined Field Ambulance,
116th Transport Coy.	Veterinary Hospital.

R.A.F. India**Headquarters : Delhi.**

Air Officer Commanding.	Air Vice-Marshal Sir W. G. H. Salmond,
	K.C.B., K.C.M.G., D.S.O., <i>p.s.c.</i>
Chief Staff Officer.	Group Captain R. P. Mills, MC., A.F.C.

Units as follow :—

Headquarters, No. 1 Indian Wing ..	Peshawar.
No. 60 (Bombing) Squadron ..	Kohat.
No. 20 (Army Cooperation)	
Squadron	Peshawar.
Headquarters, No. 2 Indian Wing ..	Risalpur, Nowshera.
No. 27 (Bombing) Squadron ..	" "
" 5 (Army Cooperation) Squadron	" "

R.A.F. COMMANDS (OVERSEAS)—*continued***R.A.F. India—*continued***

<i>Headquarters, No. 3 Indian Wing</i>	..	Quetta.
No. 28 (Army Cooperation) Squadron
Units administered direct by Command Headquarters :—		
Aircraft Depôt	Karachi.
„ Park	Lahore.
No. 31 (Army Cooperation) Squadron	..	Ambala.
Central Accounts Office	Poona.

R.A.F. Mediterranean*Headquarters : Valletta, Malta.*

This Command comprises all units cooperating with the Navy in the Mediterranean Sea area.

Air Officer Commanding. Air Commodore R. H. Clark-Hall, C.M.G., D.S.O., *p.s.a.*

Units as follow :—

R.A.F. Base	Calafrana, Malta.
(a) No. 481 (Coastal Reconnaissance) Flight	„ „

R.A.F. Units—

- (a) Headquarters.
- (b) No. 402 (Fleet Fighter) Flight.
- (c) „ 423 (Fleet Spotter) Flight
- (d) „ 460 (Fleet Torpedo) Flight.

R.A.F. Units for H.M.S. *Eagle*.

R.A.F. China

Group Captain. Edmund D. M. Robertson, D.F.C., Fleet Aviation Officer to C.-in-C., China.

Units as follows :—

- R.A.F. Unit in H.M.S. *Hermes*.
- R.A.F. Unit in H.M.S. *Argus*.
- R.A.F. Unit in H.M.S. *Vindictive*.
- R.A.F. Unit in H.M.S. *Enterprise*.
- R.A.F. Unit attached to H.M.S. *Tamar*.
- Nos. 401, 403, 404 (half), and 406 (Fleet Fighter) Flights.
- No. 422 (Fleet Spotter) Flight.
- Nos. 440, 441, 442, 443 (half), and 444 (Fleet Reconnaissance) Flights.
- Fleet Air Arm Reserve Stores Section.
- Fleet Air Arm Accounts Office.
- Fleet Air Arm Repair Section.

THE ARMY QUARTERLY.

Price 7s. 6d. net; post free 7s. 10d.
Annual Subscription £1 10s., post free to
any part of the world, payable in advance.

Binding Cases for Half-yearly
Volumes may be obtained
from the Publishers, price 2s. 9d.
each, post free.

N.B.—The Index and Title for Volume
are published in the issues for January
and July each year.

HALF-YEARLY BOUND VOLUMES.

Price 20s. each; post free 21s.

Supplying Binding Case and
Binding customers' issues in
same, price 7s. each, including
postage of volume.

WILLIAM CLOWES & SONS, Ltd., 94, Jermyn Street, London, S.W.1.



Barr & Stroud Binoculars

NONE BETTER—AND THEY'RE BRITISH

SHARP DEFINITION
LARGE FLAT BRILLIANT FIELD

PRISMATIC BINOCULARS

Type	Magnification	Focussing	Diameter of Objective		Angular Field	Field of view in yards at 1000 yds.	Price
			Ins.	m/m			
C.F.1	6	Central	0.9	23	8°	138	£6 10 0
C.F.2	6	Central	1.2	30.5	8°	138	£8 2 6
C.F.3	6	Eyepiece	0.9	23	8°	138	£6 0 0
C.F.4	6	Eyepiece	1.2	30.5	8°	138	£7 7 6
C.F.8	8	Central	1.2	30.5	7°	122	£9 10 0

GALILEAN BINOCULARS

Type	Magnification	Diameter of Objective			Inter-ocular Distance	Angular Field	Field of view in yards at 1000 yds.	Price
		Ins.	m/m	Lines				
CA.2	3½	2.19	55.6	26	65mm.	6½°	112	£2 17 6
CA.3	3½	2.0	50.8	24	63.5mm.	6½°	112	£2 12 6
CA.3	3½	2.0	50.8	24	62mm.	6½°	112	£2 12 6
CA.4	3½	1.75	44.5	21	63.5mm.	6½°	112	£2 7 6
CA.4	3½	1.75	44.5	21	62mm.	6½°	112	£2 7 6

Prices include leather cases and straps.

Send for free booklet, "On Binoculars"

BARR & STROUD, LTD. ANNIESLAND, GLASGOW and
15 VICTORIA ST., LONDON, S.W.1.

Telegram:—
Telemeter, Glasgow.

Codes.
5th & 9th Edition A.B.C.

Telegram:—
Retemeter, Sower, London.

Army Quarterly

JAN 26 1928

CONTENTS

	PAGE
I. Editorial	225
II. The Role of the Army in Imperial Defence. By Lieut.-General Sir A. A. Montgomery-Massingberd, K.C.B., K.C.M.G.	235
III. "Aut Cursu, Aut Cominus Armis." By Lieut.-Colonel G. F. Brooke, D.S.O., M.C., <i>p.s.c.</i>	259
IV. The Recent Changes in the Administrative Organization of the British Army. By Lieut.-General Sir George MacMunn, K.C.B., K.C.S.I., D.S.O.	271
V. The Downfall of Abd-el-Krim. Marshal Pétain's Work in Morocco. (With Map.)	277
VI. Lost Armies. Destruction by Political Action. By Colonel Sir Harold Percival, K.C.M.G., C.B.E., D.S.O.	289
VII. The Waterloo Campaign: Wellington's Point of View. (With Maps.) By Major-General Sir W. D. Bird, K.B.E., C.B., C.M.G., D.S.O.	303
VIII. A Gallant Company. Duty and Physical Pain	315
IX. The French Official Account. The Turn of the Tide in 1918	328
X. A Greater than Scipio Africanus? By Colonel J. F. C. Fuller	333
XI. The Young Napoleon's Spy. By F. J. Hudleston, C.B.E.	350
XII. The First Duke of Wellington. By Captain E. W. Sheppard, O.B.E., M.C.	358
XIII. Coordination of the Artillery and Machine-Gun Fire Plan in the Attack. By Colonel L. F. Renny, C.M.G., D.S.O.	372
XIV. The Function of the Military Engineer in the Army of To-day	379
XV. Notes on Intelligence Training during Manœuvres. By Major B. C. Denning, M.C., R.E., <i>p.s.c.</i>	391
XVI. "Killing no Murder." Correspondence with the Editors	396
XVII. Notes on Foreign War Books	403
XVIII. Reviews and Notices of Recent Books and Articles on Military Subjects	427
XIX. Bertrand Stewart Prize Essay, 1928. Subject selected and Rules of the Competition	440

LONDON:

WILLIAM CLOWES & SONS, LTD.

94, Jermyn Street, St. James's, S.W.

Price Seven Shillings and Sixpence net.

Digitized by Google



BRITISH INDIA

MEDITERRANEAN
EGYPT
INDIA
PERSIAN GULF
CEYLON
BURMA
SIAM
STRAITS



MAP OF THE EASTERN HEMISPHERE SHOWING THE ASSOCIATED LINES

AUSTRALIA
NEW ZEALAND
E & S. AFRICA
CHINA
JAPAN
MANILA
MAURITIUS
Etc

NEW ZEALAND & ASSOCIATED LINES

MAIL, FREIGHT AND PASSENGER SERVICES.

*P. & O. and B.I. Tickets interchangeable, also Tickets of P. & O., Orient and New Zealand Shipping and Union Companies.
All sailings subject to change, with or without notice.*

- 1—*London and Marseilles to Bombay, Karachi and Persian Gulf.
- 2—†London to Colombo, Madras and Calcutta.
- 3—†London and Marseilles to Ceylon, China, Japan and Australia.
- 4—†London and Marseilles to Port Sudan, East and South Africa.
- 5—†London to Queensland.
- 6—**London (cargo) and Southampton (passengers) to New Zealand and (by transshipment, passengers only) Australia via Panama Canal.
- 7—†United Kingdom (by any Atlantic line) via Vancouver or San Francisco to New Zealand, Australia, and the South Sea Islands.
- 8—**London (1 class only, 3rd class rates) to Australia via Cape of Good Hope.

* Weekly. † Fortnightly. ** Three-weekly. ‡ Four-weekly.

ADDRESS:

- Nos. 1, 2, 3, 4 and 5.—For Passage, P. & O. House (Manager, F. H. Grosvenor), 14-16 Cockspur Street, S.W.1, Freight or General Business, P. & O. & B.I. Offices, 122 Leadenhall Street, E.C.3.
- No. 6.—J. B. Westray & Co., Ltd., 138 Leadenhall Street, London, E.C.3, or The Trans-Pacific Passenger Agency, Ltd. (W. L. James, General Manager), 14 Cockspur Street (first floor), London, S.W.1.
- No. 7.—The Trans-Pacific Passenger Agency, Ltd. (W. L. James, General Manager), 14 Cockspur Street (first floor), London, S.W.1, and, for Vancouver Service, any office of the Canadian Railways.
- No. 8.—P. & O. Service, Australia via Cape, 32 Lime Street, E.C.3, or P. & O. House, as above.
- B.I. Agents—Gray, Dawes & Co., 122 Leadenhall Street, London, E.C.3
Paris (all routes)—Société Française P. & O., 41 Boulevard des Capucines.*

P. & O. ROUND TRIPS AND WORLD TOURS

YACHTING CRUISES by S.S. RANCHI, 16,600 tons.

Illustrated Handbook on application as below.



THE ARMY QUARTERLY

VOL. XV. No. 2.

JANUARY, 1928

EDITORIAL

ALLUSION has so frequently been drawn in these notes to the subject of the limitation of armaments that further reference to it may seem unnecessary. But the failure of the recent conference on the limitation of naval armaments at Geneva has led to so much discussion on the question of disarmament generally that it seems desirable that the *Army Quarterly* should once again set out certain considerations which the citizens of this country, and of the British Empire as a whole, would do well to bear in mind before they pay too much heed to the advice that is so freely given to them on military matters by well-meaning but irresponsible persons. Debates in Parliament, articles in the Press and speeches delivered throughout the country on the subject of disarmament make it plain that a more or less organized campaign is being undertaken to bring about a further reduction in our military strength with a view not only to curtailing our national expenditure, but also in order to demonstrate our pacific intentions to the world at large.

With the first of these objects the average taxpayer must be in full sympathy, although, as a matter of fact, it by no means follows that a saving in the annual bill for our Navy, Army and Air Force would necessarily result in so large a measure of relief for him as might reasonably be anticipated. The enormous sums voted annually by Parliament on what are known as the "Social Services" show no sign of decreasing, and the temptation to spend more upon them—if only the money were made available by a reduction in our military expenditure—would probably be too great for our legislators to resist when competing against each other for the support of the populace.

With regard, however, to that which appears to be the second object of the present disarmament campaign there is likely to be

considerable difference of opinion—for, luckily for the safety of this country, there are still a good many people who mistrust the value of pacific gestures and consider that we have already gone far enough in the way of disarmament to prove the sincerity of our desire for peace—at any rate, until our example has been more generally followed by other nations.

* * * * *

It is much to be regretted that some of those who are now for one reason or another so loudly advocating further reductions in our defence forces should, in their public utterances, lay so much stress upon the fact that we are to-day spending more on the Fighting Services than we spent in 1913-1914. Putting aside altogether the relative value of money between then and now, the reasons for this increased expenditure are seldom, if ever, stated, with the result that an entirely false impression is conveyed to the outside world that we are increasing rather than diminishing our armaments.

A speech, delivered recently in the House of Commons by Mr. Lloyd George, is a typical example of this kind of misleading propaganda. He quoted figures which proved to his own satisfaction presumably that Great Britain and the United States of America were spending more on armaments this year than they spent in 1913-1914, whereas France, Italy and other countries were spending considerably less. "I tell you what this means," he cried. "It means that when we go to the Disarmament Commission and begin to urge them to cut down their armies, they will say, 'What about you? We, at any rate, have cut down our expenditure on armaments. You have increased yours.' What they say in so many words is this, that the two countries that did most of the blethering about peace, Great Britain and the United States of America, have increased their expenditure on armaments. They say, 'Before you start lecturing us who are supposed to have greater armaments, cut down your own expenditure.' We answer, 'Oh yes, but we have got rid of conscription. We had huge armaments and conscription, and we have abolished them!' They say, 'Yes, but your defence does not depend on huge armaments. Your defence depends upon your Navy, and our defence depends upon our conscript armies.'"

To the ordinary individual it might possibly occur that the annual cost of our naval, military and air forces was a matter of small concern to foreigners. What does concern them, however, is the result that we get for the money we spend as a potential factor in war. Mr. Lloyd George did not think it worth while to point out in his speech

* See *Parliamentary Debates*, House of Commons, vol. 210, No. 124, p. 2133.

that we have actually reduced the numbers of men serving in the Navy from 151,000 in 1914 to 103,125 in 1926, and of the men serving in the Army from 186,400 in 1914 to 159,400 in 1926. Nor did he trouble to explain the principal reasons why the cost of our defensive organization is higher to-day than it was before the Great War. These reasons, so far as they affect the Navy, were touched upon by Mr. Bridgeman, First Lord of the Admiralty, in a speech which was reported in *The Times* on the 2nd of December, 1927, and, as they apply more or less in the case of the Army, they are worth setting out here.

Mr. Bridgeman pointed out that the idea that we had increased our armaments since the war was due to an entire misconception of the way in which the money was spent. Fifty per cent. or thereabouts of the money voted by Parliament for the Navy was spent on the naval *personnel*, whose pay was 120 per cent. higher than it was in 1914. In addition to this, he explained that there was an increased expenditure of 100 per cent. in the wages paid to the men employed in the dockyards, and that the non-effective charges for pensions on the Admiralty Vote had been increased by 150 per cent. as a result of the war and the reduction in the size of the Navy. When, therefore, the increase in the cost of materials and stores is also taken into consideration, it is not very surprising that the cost of the Fleet to-day should be greater than it was in 1914. And yet, as Mr. Bridgeman in his speech went on to point out, we have at the present time only 395 warships, tonnage 1,440,000, whereas in July, 1914, we had 704 warships, tonnage 2,695,000. These figures speak for themselves, and, when it is remembered that at the end of the war we had 1,327 warships, tonnage 3,294,000, it is strange that any man, least of all a statesman who has been Prime Minister, should publicly dare to suggest that there are grounds for doubting the sincerity of this country in the matter of the reduction of armaments.

The truth of the matter is very different. We have since the Armistice, as Lord Cushendun stated in his speech at Geneva the other day, put nearly 2,000,000 tons of shipping on the scrap heap, reduced two of our principal naval bases to a caretaking basis, kept sufficient troops only to serve as an Imperial police force, and retained a minimum force in the air. In other words, we have given a practical example in disarmament to the other nations and have cut down our defence forces as far as it is safe for us to do so until the political situation throughout the world is a good deal clearer than it is to-day.

* * * * *

It is obvious that no success can attend the efforts of the advocates of a general disarmament so long as there is no real feeling of security among the nations. "Security—not merely security in fact, but the sense of security—is the condition precedent of assent to any system of extensive disarmament, for all the Great Powers. Security, arbitration, and disarmament are knitted together; and security . . . must come first. Once established, and once trust in it has taken root, arbitration and disarmament logically and naturally follow." *

It is satisfactory, therefore, to find that a Security Commission has now been appointed by the Preparatory Commission for the Disarmament Conference at Geneva, the task of which will be to define more clearly what precisely is meant by "security" so as to establish a common understanding of the term among the nations. There are of course certain objections to the contracting of security treaties between individual countries, but if such treaties are framed on similar lines to the Treaty of Locarno, and if they are made public and registered with the League of Nations, most of these objections would be removed.

* * * * *

The administrative change at the War Office, by which certain duties previously undertaken by the Q.M.G. have been transferred to the M.G.O., has created a considerable discussion in the Press and elsewhere. A memorandum, published by the Secretary of State for War after he had had an interview with the Army Committee of the House of Commons, has explained to the public the reasons which have prompted the Army Council to make the change, and, although there are no doubt experts who still remain unconvinced as to the wisdom of what has been done, there are arguments from a purely administrative point of view in favour of some revision of the previously existing system. An organization under which two separate departments at the War Office were concerned with the production and repair of mechanical vehicles was admittedly a complicated one, and one, too, that was likely to grow still more complicated and difficult to work as the mechanization of the Army proceeded. In the future the M.G.O. is to be responsible "for all research, experiment, design, inspection, provision, storage, issue and repair of all tracked, semi-tracked and wheeled mechanical vehicles, except vehicles on the establishment of the R.A.S.C., which will continue to be provided and maintained by the Q.M.G. under specifications approved by the M.G.O."

* See *The Times*, leader, 3rd of December, 1927.

The only real objection to this change in organization is that it creates a new administrative chief staff office at G.H.Q. in the field. Any one who is at all familiar with staff duties in time of war must realize that the fewer heads of departments with whom a Commander-in-Chief has to deal, the more efficient and expeditious is likely to be the working of the machine. In the French Army in the field there are only two principal staff officers, namely, the Chief of the General Staff and the Chief of the Administrative Staff. The former is entirely responsible to the Commander-in-Chief for all General Staff matters and the latter for all administrative matters. There is no doubt that a system of this kind relieves the Commander-in-Chief of much routine work and enables him to concentrate his attention upon the strategic and tactical problems of the campaign. His two principal subordinates can deal with the various departments which are required for the technical and administrative organization of the Army. In the late war the British Commander-in-Chief had three principal staff officers ; in any future war—unless it is what is described in the Secretary of State's memorandum as " a war on a national scale " when " it may be found necessary to appoint a Chief of the Administrative Staff "—he will be provided with four principal Staff officers. This addition to his staff, far from relieving a harassed Commander-in-Chief from unnecessary work, will only add to his burden and complicate the machinery of the staff. He will be " so overwhelmed in settling the disputes of his assistants " that, as one correspondent of *The Times* suggests, " he will not have time for anything else."

It is much to be hoped that the staff organization visualized by the Secretary of State in the event of a great war will become the recognized system in the British Army.

* * * * *

The Collective Training Season of 1927 was mainly remarkable for the advance in the mechanization of the Army. An experimental mechanized force was formed on Salisbury Plain, but no attempt was made to bring about any revolutionary change in military organization. The object in view was to ascertain by practical experiment in the field the best method of employing such mechanical force as may be at our disposal in the next few years and to try out the various types of vehicle available. Although there was not sufficient time to complete the experiment, the results obtained have undoubtedly provided much valuable information both technical and tactical.

It was made clear that the mechanization of the first line transport

of cavalry regiments, with its resulting reduction of the burden carried on the horses, has greatly increased the radius of action of this arm. A cavalry brigade, for instance, carried out a night march of thirty-six miles at a pace of five miles an hour and was fit to fight when it reached its destination. It is also recorded that a regiment marched forty-eight miles in nine hours, including a halt of one hour, and concluded its journey with its horses in good condition. Motor tractors were utilized by 25 per cent. of the Territorial field batteries and by 90 per cent. of the Territorial medium batteries, and it is reported that the advantage gained in training by these batteries over horse-drawn units was very great. There seems to be, however, considerable difficulty at the present time in deciding upon a suitable M.T. vehicle.

* * * *

Throughout the Training Season the problems arising from mechanization were thought about and talked about continuously throughout the Army, and most staff exercises included the action of a mechanized force. In view of the great advance in mechanical knowledge and the immense possibilities of future development, it is all to the good that officers should evince so much interest in mechanical warfare. But there is one attendant risk in so much attention being devoted to the study and development of armoured forces and armoured fighting to which allusion may perhaps be drawn here. The risk is that cavalry and infantry may lose all confidence in their own powers. It is true that infantry cannot attack either armoured vehicles or automatic weapons unless very strongly supported. But infantry, with its increased fire-power, is very powerful and will become even more so when once a satisfactory anti-tank gun has been brought into existence. Cavalry, too, as is pointed out in an article in this number of the *Army Quarterly*, with its increased mobility and fire-power, is still a powerful arm either in attack or defence.

The process of mechanization must continue, but those in authority would do well to bear in mind that it is all important to preserve the moral and self-reliance of the men upon whom must still depend success or failure in war.

* * * *

An American correspondent, writing with regard to the review of the late Major-General J. T. Dickman's book "The Great Crusade" in the October number of the *Army Quarterly*, considers that the statement of the reviewer that at St. Mihiel "the enemy was in fact in the act of evacuating the salient" when the Americans

attacked "gives an incorrect impression." He adds, *inter alia*, that "His (the German) infantry in its entirety and all his artillery, but very few heavy guns, were still in position."

The two converging attacks on the St. Mihiel salient on the 12th of September, 1927, were made by the I and IV American Corps, and the V Corps (containing 2 American divisions and 1 French division), with the French II Colonial Corps in the centre connecting and accompanying them.

The following is an exact translation of the French official account, Tome VII, volume 1, pages 309-310: "At 5 a.m. the principal attack, that of the I and IV American Corps, was launched in the general direction of Thiaucourt. The two corps progressed, without encountering great resistance, across the thick wire entanglements accumulated on this part of the front during four years of stabilization. The enemy, it seemed, had only a small amount of artillery to defend the advanced positions, and withdrew his infantry step by step; he had, we have seen, taken measures for the evacuation of the St. Mihiel salient; the operations of retirement coincided, in all probability, with the launching of the offensive, and upset by it, soon degenerated into a precipitate retreat." The account goes on to describe *nettoyage* (clearing up) rather than fighting. The phrase used in the review appears, therefore, to be justified, more especially as it is supported by no less an authority than Ludendorff. He states that he had ordered the evacuation of the St. Mihiel salient on the 8th of September, four days before the American attack. "Outposts only were to be left in the front trenches. The work of evacuation had not been carried very far when on the 12th of September the attack developed. The evacuation had long been planned and prepared." It is possible, however, that when the American and German histories of 1918 appear there may be reason of course to revise the present judgment.

* * * * *

The first issue of the *Irish Army Quarterly*, "An T-oglach," in a new and different form well printed and profusely illustrated, appears as an official organ emanating from the Department of Defence in Dublin. Its intention is to provide a "helpful stimulus to members of the Forces to extend their professional knowledge," and to afford the Irish public an opportunity of "judging the work, progress and evolution of the Army, in a manner of speaking, from within." There are not many articles on purely military subjects, but each of them is of considerable interest. Commandant D.

* See "My War Memories," by General Ludendorff, vol. ii, pp. 708-709.

Bryan explains why Ireland needs a Defence Force, his reasons disclosing a point of view which will be fresh to most English readers ; the commander of the Corps of Artillery, who can hardly be accused of " undue attachment to a saffron-shirted ideal," produces a very practical argument in favour of horse-drawn rather than tractor-drawn field batteries for Ireland ; Colonel J. J. O'Connell describes in detail Sarsfield's raid on William III's siege train in 1690, the exploit which caused the siege of Limerick to be raised ; and the Director of Medical Services puts the case for Army pensions as regards the commissioned officer. It is, of course, unanswerable. Major Dening's " Modern Problems of Guerilla Warfare " is reproduced by permission from the *Army Quarterly* of January last year.

Several of the remaining contributions are in Irish, and great editorial interest is displayed in the Irish Speaking Battalion (" An Cath Gaedhealach "), which, it is urged, should be used to leaven the whole Army with " a knowledge of the tongue on which our individuality as a nation depends." In the editorial pages we are also reminded that the Irish Army expenditure for 1927-1928 is £2,183,767, and that an Army Reserve has yet to be created as well as a Territorial Force or a Militia. It seems also to be the intention to establish Officers' Training Corps in the Irish Universities—indeed, they appear to be " approaching reality." The three military Commands have now been replaced by six military Districts each occupied by a brigade, and an inspection staff has been brought into existence.

* * * * *

General Sir Arthur Holland, K.C.B., K.C.M.G., D.S.O., M.P., who died on the 7th of December, 1927, in his sixty-seventh year, joined the Royal Artillery in 1880 and had a long and distinguished career in the Army. He was the youngest son of Major-General Butcher, R.M.L.I., and changed his name to Holland in 1910. He served in the Burmese Expedition, 1885-1887 and 1887-1890, and in the South African War, 1899-1902. In this latter campaign he was awarded the D.S.O. for distinguished service whilst in command of a battery at Stormberg. He was subsequently Military Secretary to General Sir Charles Mansfield Clarke when the latter was Governor of Malta, assistant Military Secretary at the War Office, and Commandant of the R.M.A., Woolwich. On the outbreak of the war with Germany, Holland was still holding the last-mentioned appointment, but he succeeded in finding his way to France as Brig.-General, R.A., 8th Division, in September, 1914.

In July, 1915, he became Brig.-General, R.A., VII Corps, and a few months later was given the command of the 1st Division. In June of the following year Holland, who was now a substantive Major-General, was appointed Major-General, R.A., Third Army, and he held this appointment until February, 1917, when he was promoted to command the I Corps. He retained this position until the Armistice.

Holland was a sound and capable artillery officer, and was one of the first to realize the changes which scientific developments were going to make in the use of artillery. "He had foreseen the possibilities of utilizing the services of expert survey *personnel* in the direction of artillery fire, and by taking out Major Winterbottom, R.E., and a few N.C.O.'s of the Ordnance Survey attached to his command, he was instrumental in laying the foundation of the organization which developed into the flash-spotting, sound-ranging, and artillery survey service covering the front of the British Armies in France."* As a commander, Holland proved himself both able and energetic, and his considerable experience as a gunner always ensured an effective cooperation between the artillery and the infantry of the formations which he commanded. He was promoted Lieut.-General in January, 1919, and was created K.C.B. in 1918 and K.C.M.G. in 1919. In 1924 he stood for Parliament, and won a brilliant victory for the Conservatives at Northampton. He took little part, however, in the business of the House of Commons, although he was seldom absent whenever a Service subject was being discussed and was a regular attendant at the Army Committee.

* * * * *

The Editor-in-Chief of the Medical History of the War, Major-General Sir William Macpherson of the Royal Army Medical Corps, died in October at the age of sixty-nine. An officer of great knowledge and experience and immense energy, a phenomenally good linguist, and a specialist in medical organization and in the international status of medical aid in war, he has left a gap that no one can quite fill. But he had finished his great work on the war, not only editing the whole book, but writing the account of the employment of medical staff and units in all the theatres. He was attached throughout the Manchurian War to the Japanese forces, was the first medical officer appointed to the D.M.O. Staff, 1905-1909, and was one of the British delegates for the revision of the Geneva Convention in 1906. At the beginning of the war in 1914 he was Deputy Director-General of Medical Services at the War Office, in

* See *The Times*, 8th of December, 1927.

which capacity he had to deal with the expansion twelvefold of the medical services. In 1915-1916 he was Director of Medical Services, Salonica ; then Director of Medical Services of the First Army in France, and finally Deputy Director-General at G.H.Q. It was largely to him that, in the great battles of the latter part of the war, medical accommodation and medical supplies never failed. He worked and played hard almost to the last. His only son was killed before La Bassée serving in the Gurkhas in December, 1914.

* * * * *

By the death on the 28th of November of Mr. F. J. Hudleston, C.B.E., Librarian of the War Office, at the age of fifty-eight, the *Army Quarterly* has lost a most valued contributor, who mixed exact knowledge with a pretty humour. After an apprenticeship of five years at the British Museum, he spent the remainder of his life with the "brain of the Army." He was appointed in 1895 Assistant Librarian to the Intelligence Department, then at 16-18 Queen Anne's Gate, becoming Librarian soon after it was transferred to Winchester House. After the move to the New War Office in Whitehall, the libraries of the Secretary of State and of the Intelligence (then called General Staff) were amalgamated and Hudleston became Librarian of the War Office.

Ever ready to help others from his vast store of knowledge of military literature in all languages, it was only of recent years that he took to writing and produced "Warriors in Undress," and the British and American public discovered that a librarian could be a humorist. Just before his death he had completed "General Johnny Burgoyne."

10th of December, 1927.

THE RÔLE OF THE ARMY IN IMPERIAL DEFENCE *

BY LIEUT. - GENERAL SIR A. A. MONTGOMERY - MASSINGBERD,
K.C.B., K.C.M.G.

BEFORE considering the situation to-day, I should like to recall to you the chief landmarks in the expansion of the Empire, and also in the evolution of the Army, so that we can see how the present situation has developed, and also what lessons we can learn for the future from the events that have happened in the past. After all, history, I think you will agree, is usually the best guide.

In order to avoid burdening what I am going to say with too many figures and dates, I have had a table made out showing the chief landmarks in the expansion of the Empire. It shows how from a small island nation in the time of Elizabeth, shaken by civil wars within, and by constant fighting with the Irish and the Scots, England has grown steadily, but perhaps somewhat haphazardly, into the vast Empire which we now know, with thousands of miles of land frontiers, vast possessions on every continent, thousands of miles of sea communications, and numerous fortresses, fuelling stations and harbours on which to base her Fleets.

In this short summary of the landmarks in the expansion of the Empire, I should like to draw your attention to a few salient points. First, from the time that our foothold on the Continent of Europe ceased to exist with the loss of Calais, when the French drove us out in 1558, our expansion as an oversea Empire, both eastward and westward, began, first, at the expense of Spain and Portugal, and later, at the expense of Holland and France. The eyes of Englishmen in those days turned seawards to the wealth of the Indies and of the Spanish Main. As Mr. Trevelyan states, in his recently published "History of England":

"From Tudor times onwards, England treated European politics simply as a means of ensuring her own security from invasion and of

* This article was delivered as a lecture at King's College, University of London, 2nd of November, 1927.

furthering her designs beyond the ocean. Her insularity, properly used, gave her an immense advantage over Spain and France in the maritime and colonial contest."

And a little later he goes on to say :

" Indeed, England's success against Spain after the defeat of the Armada was limited not so much by want of naval power as by want of military organization and tradition to seize the opportunity created by the senior service."

This latter remark is especially true, because from feudal days until the time of Cromwell we had really no army that we could send abroad to fight on the Continent.

Then, during Elizabeth's reign and in Stuart times, colonization and exploration were the result of the enterprise and effort of men like Hawkins, Drake, Raleigh, Frobisher, Gilbert, and others of the same type, and also of the Chartered Companies, to which Royal Licences were given to trade and colonize in the West and in the East. Speaking generally, there was little Royal or Government support given to such enterprises, but both Royalty and the Government were always ready to take their share of the spoils.

The end of the seventeenth century, and practically the whole of the eighteenth century, were in reality one long struggle with Holland, France and Spain for sea supremacy, on which depended our successful colonization of America, our trade with the Americas and the West Indies, the foundation of our Indian Empire, and the maintenance of the sea route which led to India and to the East. Whenever we lost this sea supremacy, even temporarily, our enterprises and our hold on the various continents were in danger. For example, when Dupleix and La Bourdonnais, in 1746, held temporary command of the Indian Ocean, our hold on India was very precarious, and the temporary loss of sea supremacy was one of the chief causes which led to the loss of our American Colonies in 1783.

On the Continent, in the early part of the eighteenth century, we supplied, in the person of Marlborough, the greatest general of the century, and chiefly through him, and partly through the prowess of our troops, our Army gained considerable prestige on the Continent. But, speaking generally, throughout the whole of the eighteenth century we employed a very small Army on the Continent. We supplied the Continental Powers, which were allied with us, with money, not with men, and such soldiers as we could raise we employed chiefly overseas on various expeditions. The

result was that at the end of those wars, the size of the Empire was very much greater, but our Army was no larger.

Then we come to the great French wars between 1793 and 1815. There history repeated itself to a great extent. We again supplied the only general on the Continent who was fit to stand up against Napoleon. We strangled France at sea; we hired many mercenaries to fight for us on the Continent, and, until comparatively late in the war, the larger part of our forces was employed overseas. Then, at the Peace of Vienna in 1815, we emerged with a still greater Empire, but with a very little larger Army. It is only fair to say, however, that the British Army during the latter part of the French War had taken a far larger part on the Continent than it had ever taken before, and, thanks to Wellington and to its own prowess, the Army emerged from that war with a much enhanced prestige.

Then you will notice that after the loss of the American Colonies in 1783, and after the French War, our expansion as a Colonial Empire increased very rapidly, first of all towards Australasia and the East, and also in Canada, and then southward throughout Africa. In fact, it is not incorrect to say that the whole of the nineteenth century was an almost unending series of small wars in every part of the world against savage or semi-civilized nations.

Then we come to another period when the larger Colonies became Dominions—partners in the vast Empire—and prepared to take over their own protection, and in the case of big wars, like the South African War or the Great War, ready to take a prominent part in South Africa or on the Continent and elsewhere in defence of the Empire as part of an Imperial Army.

In the South African War, as you will remember, all the available Voluntary Forces of the country and the Empire were employed across the seas. Our sea supremacy was never challenged, with the result that we were able to employ all those forces in South Africa, and to leave other portions of the Empire undefended without any risk. In the Great War our main effort, for the first time in the history of the Empire, was made on the Continent of Europe and was undoubtedly the deciding factor. But, even so, we were at the same time fighting in some half a dozen minor theatres of war, in Asia and Africa. For the first time in its history, the whole nation was mobilized for war, and the expansion of the naval, military and air forces was on a scale that could hardly have been foreseen.

As a result of the Great War, again the limits of the Empire were further extended and its responsibilities further increased, but unfortunately the Great War saddled us with a crushing National Debt.

Now it is very noticeable how, throughout the eighteenth, nineteenth and twentieth centuries, the sea-power and central position of Great Britain became more and more the decisive factor in the big wars which took place during those three centuries. But it is equally certain that without land forces and with sea-power alone, this vast Empire could not have grown as it has done, or maintained its dominating position. It has been well said that "The Army is the projectile fired by the British Fleet." The chief difficulty is, and always has been, to direct the projectile on the right target, and that is the business of the Government. It is also the business of the Government to ensure that the projectile is large enough and up to date.

I will now deal with our military progress, and how it has kept pace with the vast expansion of the Empire. Here again, I have drawn up for you a table of landmarks in the evolution of the Army. I have not gone into any details prior to 1793, when the French Revolution not only set all Europe ablaze, but largely changed the aspect of war itself by the appearance in the field of the national armies of France. That was the first appearance of a national army. Moreover, about that time—that is to say, about 1803–1805—there arose the first real danger of invasion of Great Britain since the days of the Armada.

I would draw your attention to the chief points in the evolution of the Army in the period from 1793 to 1914. First, we have Great Britain's effort against Napoleon directed by Pitt and Nelson from 1793 to 1806, and by Castlereagh and Wellington from 1809 to 1815. Here we see the first appearance in the Army of linked battalions and a Militia for feeding the line. We also see the crowding of men into the Volunteers, Fencibles and the local Militia, all for home defence only, with the consequent difficulty of getting men for service abroad; the great use that was still made of foreign mercenaries, and, lastly, the defects of the system of promotion by purchase for officers, which system had in many ways very bad effects in the Army.

After 1815, and the Peace of Vienna, we come to what is usually called "the dead period," followed by the very rude awakening of the Crimean War. One writer says: "The war"—that is to say, the war against Napoleon—"had been successful, the country was glad to be rid of military questions, and, while chary of supplies, was content to leave military legislation to take care of itself." The Volunteers disappeared and the general Militia ceased to be enrolled, with the result that there were no reserves of any kind for the Army.

By 1821 the strength of the Regular Army had fallen to about

100,000 men all told—a dangerously low level—and a large proportion of these were hidden away in unhealthy colonial stations for fear that more of them should be disbanded. The Army at home and abroad was given occupation largely on police duties. It is interesting to compare this state of things with the employment of twelve or fifteen battalions at the present moment in Shanghai on what, I suggest, are purely police duties.

In India, especially during the early half of the nineteenth century, there were almost continuous wars and severe fighting against the Mahrattas, in Central India, in Nepaul, in Burma, and the first Afghan, Sind and Sikh Wars, and the total number that we employed there was only some 19,000 Europeans, exclusive of the East India Company's troops.

By 1854, owing to alarms on the Continent in 1848–1849, the size of the Army had been increased from 100,000 to about 140,000, and the Militia was once again brought into being. But in 1854 there were no reserves to the Army, except 10,000 pensioners and 25,000 to 30,000 militiamen, who by law were not allowed to transfer to the Regular Army.

Almost as dangerous as the numerical weakness of the Army was the heterogeneous administration by which it was controlled and administered. There was a Secretary of State for War and the Colonies, who had practically the entire control of the Army in time of war and decided on the strength to be maintained in peace and the size of the garrisons allotted to the Colonies. There was a Secretary at War, who was not usually in the Cabinet, who dealt with the rates of pay, food and clothing to be given to the Army. There was a Commander-in-Chief, who was responsible for the efficiency, discipline and training of the cavalry and infantry, and commanded the troops at home. There was a Master-General of Ordnance, who was responsible for the discipline and pay of the artillery and engineers, and for fortifications. The Home Secretary was responsible for general home defence questions, and controlled the Militia and Yeomanry while they were disembodied. The Treasury had direct control of the Commissariat Department. Lastly, there was a Board of General Officers, who inspected the clothing of the Army.

That was the situation when we embarked light-heartedly on the Crimean War, and it is not unfair to say that there was no organization, either military or civilian, no preparation for war; there were no reserves, no plan, no method, no training, and no transport. The only redeeming features of the Crimean campaign

were the courage and endurance of the troops, and the determination of the people at home to see the war through. Who was to blame? I would submit that the British nation itself was even more to blame, perhaps, than its leaders, as the public had taken no interest whatever in the Army since peace had been signed in 1815. To go into the Army was looked upon as a disgrace, and what little there was left of the Army was hidden away as much as possible in colonial and other stations.

Then we come to what are known as the Cardwell reforms. There were several factors which helped to bring about these reforms. First, there was the Crimean fiasco with its unnecessary loss of life and the horrors which accompanied it, owing to the lack of preparation and of organization. Then there was the Indian Mutiny, which resulted in the Crown taking over the government of India in 1859, and the responsibility of finding drafts and reliefs for the European garrison in India, which was put at 61,000 in 1870-1871, rising to 72,000 in 1886-1887. This is an interesting point, because from this date onwards the strength of the forces maintained at home was governed by the requirements of India and the colonial reliefs and drafts.

Another factor was the Prussian victories over Denmark in 1864, over Austria in 1866, and over France in 1870-1871. These thoroughly roused the British nation, and an ever-increasing interest in military matters was evinced by the British public. The Prussian system was carefully studied not only by soldiers but also by civilians. It was obvious that these campaigns showed the necessity of a nation having a sound peace organization for its Army, powers of expansion for war, and a well-educated staff. The Government of the day was forced by the strength of public opinion to take steps to put its military house in order.

Meanwhile, the Crimean War had got rid of some of the anomalies of Army administration. In 1855 a "Secretary of State for War" had been appointed who absorbed the duties of the "Secretary at War." The Board of Ordnance was abolished, and its duties were distributed between the Commander-in-Chief and the new War Department. The control of the Militia and Yeomanry was transferred from the Home Office to the War Department. The Commissariat Department was taken from the Treasury and put under the Secretary of State. But the Secretary of State was given a soldier, junior to the Commander-in-Chief, as permanent Under-Secretary of State for War. Undoubtedly, the weak point in these changes in organization, which were otherwise a very great improve-

ment, was the position of the Secretary of State, with a soldier Under-Secretary, at the War Office, and the Commander-in-Chief at the Horse Guards, dealing with each other by correspondence.

Lord Cardwell became Secretary of State in 1868, and far-reaching reforms were introduced between that time and the end of his tenure in 1874. The principal reforms were : The Horse Guards and the War Office were brought under one roof. The Reserve Forces, that is to say, the Militia, the Volunteers and the Yeomanry, were brought under the control of the War Office. Short Service, with a total of twelve years' service, was introduced which could be varied according to circumstances. That is to say, the number of years served with the Colours or with the Reserve could be varied to meet the situation as regards recruiting and the strength of the Reserve at the time. Then the garrisons in the Colonies were much reduced so as to have more units at home and to equalize the number of battalions at home and abroad,* and also to encourage the Colonies to raise and maintain forces for their own defence. Regular line battalions were linked in pairs. Promotion by purchase was abolished and retired pay and pension introduced at a cost of 8 millions. The first Autumn Manœuvres were held. Lastly, a small Intelligence Department was formed as part of the Adjutant-General's Branch.

These reforms were far-reaching and were a great step forward, but they still left considerable weakness in our military organization. There was no proper organization in the Army beyond brigades ; there was no scheme whatever for the mobilization of the Regular Army, and still less for the Territorial Army. Up to 1905 the Volunteers were not organized ; they were simply a conglomeration of units of all sorts of establishments varying largely in strength according to the ideas and fancies of the locality or of the commanding officer, and they were without field artillery or field engineers, and they had no administrative services. Then, again, there was no real staff organization for war or " thinking " department at the War Office, except a small Intelligence Department. The training of officers remained indifferent, and was only partly recompensed for by the experience gained in small wars. Drill and military training together with cookery, the School of Music, and sergeants' messes were dealt with at the War Office by a small section consisting

* 1859. 30 battalions at home ; 72 in India ; 30 in the Colonies (4 in Canada, 4 in Australia).
 1868. 47 battalions at home ; 94 abroad.
 1870. 60 battalions at home ; 81 abroad.
 1872. 70 battalions at home ; 72 abroad.

of two officers. This shows the importance which was attached in those days to drill and military training. Lastly, there was no supply of officers to fall back upon either for the Regulars or for the Auxiliary Forces in time of war.

All these defects were soon brought out, and brought out very forcibly, by the South African War. Meanwhile, in 1881, the linked battalions lost their old numbers, and flogging was abolished in the Army. In 1882 the Egyptian War was the first test of the employment of a short service army with reserves,* and it went through the test very well. In 1886-1888 a scheme of mobilization for war was brought in, but it was not completed by the time the South African War broke out in 1899. The South African War employed every Regular battalion in the United Kingdom, except one, several Militia battalions, Special Service Companies of Volunteers, and the C.I.V., and also the Imperial Yeomanry—some 30,000 men—and the colonial contingents. Our organization was improvised, and was, up to the fall of Pretoria, again divisional. One cavalry division and nine infantry divisions were formed. To defend the United Kingdom—which as a matter of fact was never in danger—and to find drafts and garrisons for Gibraltar and other places, cavalry reserve regiments, provisional battalions and garrison battalions were raised. The Militia was embodied and the Volunteers were given training and brigaded. In fact, the whole of the organization was improvised to meet an almost entirely unforeseen crisis. After the South African War there was a flood of Committees and Royal Commissions, and the defects alluded to in our organization and preparation for war very soon came to light under their searching and able inquiries. Again the force of public opinion demanded drastic reforms and compelled the Government of the day to act. Governments, like every one else, are only human, and they will not take up measures of reform or evolution, unless there is a very strong public demand for them.

One extract from the Report of the Royal Commission under Lord Elgin is somewhat illuminating, in view of what happened afterwards. It runs as follows :

“ The true lesson of the war, in our opinion, is that no military system will be satisfactory which does not contain powers of expansion outside the limit of the Regular Forces of the Crown, whatever that limit may be. If the war teaches us anything, it is this, that throughout the Empire, in the United Kingdom, its colonies and dependencies, there is a reserve of military strength which, for many reasons, we cannot and do not wish

* Short service battalions were present at Majuba in 1881.

to convert into a vast standing army, but to which we may be glad to turn in our hour of need, as we did in 1899. In that year there was no preparation whatever for mobilizing these great resources. Nothing had been thought out, either as to pay or organization, conditions of service, or even as to arms."

Fortunately for us, Lord Haldane and his military advisers took this to heart before the storm of the Great War broke over the Empire.

Beside the Elgin Commission of 1902, there was the Duke of Norfolk's Committee of 1903 dealing with the Auxiliary Forces. This Committee left no room for doubt in its Report. It stated :

"The Militia, in its existing condition, is unfit to take the field for the defence of the country. This is not the fault of the officers and men. The Volunteer Force, in view of the unequal military training of the officers, and the limited training of the men, and the defects of organization and equipment, is not qualified to take the field against a regular army."

It recommended National Service for home defence.

In 1904 the Esher Committee commenced its work. Its main recommendations were—and the first, to my mind, is almost the most important :

"(1) The importance of the Defence Committee should be realized and full use of it made by the Prime Minister for the study of Imperial resources ; of the strategic problems of defence ; of the varying factors upon which Imperial rule rests ; and the calculation of the forces required to meet possible dangers. A permanent Secretariat was essential.

"(2) The reconstruction of the War Office with the sole view of the effective training and preparation of the Military forces of the Crown for war. The abolition of the appointment of Commander-in-Chief, and formation of the Army Council. The Secretary of State to be on the same footing as the First Lord of the Admiralty, and to be the sole person by whom military matters are submitted to the Crown."

These changes were made at once and were brought in in 1904.

The Esher Committee also recommended the formation of a General Staff. One of the principal results of the formation of the General Staff has been the great advance of the staff in the knowledge of its duties and the spread through the Army of a common doctrine.

Lastly, it recommended that the Auxiliary Forces should come under the Army Council.

From what I have just said, you will gather that when Lord Haldane came in as Secretary of State in December, 1905, he had plenty of material, thanks to these various Committees and Commissions, on which to work. He began, very wisely, with the

completion of the formation of the General Staff, which had been begun by Mr. Arnold-Forster, so that in his further reorganization of the Army, he might have the assistance of the best brains in the Army to help him in his task. He had, moreover, the great advantage, as I said just now, of having a strong public opinion behind him in favour of a thorough reorganization of our military forces and the elimination of any part of them which was not likely to pull its weight in war. There were, of course, and there always are, some "Die-hards" in Parliament and out of it who were opposed to any change, just as there had been bitter opponents in the past to the abolition of promotion by purchase and of flogging in the Army.

Lord Haldane brought in certain measures of great importance, especially in view of what happened ten years afterwards. The Regular Army at home—fixed, as I have told you, as regards strength by the requirements of reliefs and drafts for India and the Colonies—was organized into six divisions of infantry and one division of cavalry—about 150,000 men. The Militia was to become the "Special Reserve" in order to feed the Regular Army. To provide for expansion in a prolonged and serious war, the Territorial Army was organized by forming out of the Volunteers and Yeomanry by reorganization, disbandment and adjustments, fourteen cavalry brigades and fourteen Territorial infantry divisions. An Officers' Training Corps was instituted at Universities and Public Schools to supply officers for the Territorial Army and Reserve of Officers. This would form a potential force from which officers could be drawn in the case of a big war. Lastly, there was the formation of a Supplementary Reserve of Officers.

These reforms, in their results in the Great War, proved to be more far-reaching and even greater than Lord Cardwell's reforms, and it is interesting to note that where there were failures in the Great War, it was often due to a departure from the policy which Lord Haldane and his military advisers had outlined; or because, in other cases, that policy was not well carried out.

I will only mention a few of them. The work of the General Staff at the War Office at the beginning of a war is probably one of the most important factors of success, and it was at the beginning of the war that most of the General Staff and a large number of senior officers were allowed to leave the War Office and go out to France with the Expeditionary Force, thus dislocating the organization which Lord Haldane had so carefully and laboriously built up. Secondly, we allowed hundreds of ex-public school boys, ex-university men, and others very suitable for officers to enlist as privates, and to go

out in the early days of the war, and unfortunately many of them became casualties. Thus we lost the great value of their education and latent powers of leadership. They would have been invaluable later on in the war. Then we took away Territorial battalions from their divisions as soon as they were ready and sent them out to reinforce the Regular divisions. The situation in France in the winter of 1914-1915 may have demanded this policy and made it necessary. All I wish to point out is that it was a severe handicap to the Territorial divisions when they were sent out themselves. Lastly, the Territorial organization was upset, and we wasted the experience of the County Territorial Associations by raising the new divisions as entirely new formations. On the other hand, it may be claimed, and claimed with a great deal of justice, that it was Lord Kitchener's name which induced men to enrol in very large numbers and to come forward so quickly for those new Kitchener divisions.

These are some initial mistakes made in the Great War, but they were entirely counterbalanced by the enormous improvement in the preparations made by and in the War Office before the war, and in the state of efficiency which had been attained by the Army at the outbreak of war, if you compare the situation in August, 1914, with that obtaining previous to any of our other wars, or if you compare it with the situation obtaining in some of the continental armies. For instance, there was a definite plan of campaign for the Expeditionary Force already cut and dried when it landed in France. Mobilization had been worked out to the last detail, and not only mobilization, but every detail of the transportation of troops from England to France. The duties of the various branches of the staff were clearly laid down and understood. Thanks to the training manuals a common doctrine was taught throughout the Army. Manœuvres and staff exercises had given commanders, at any rate, a considerable amount of experience in the handling of largish bodies of troops. The British Army of 1914-1918, I think you will agree, was the best fed and the best clothed army that has ever gone to war. It is interesting to note in that connection that the Quarter-Master General did not dash out to France directly war was declared. The medical arrangements, except in Mesopotamia, went through practically without a hitch. Adequate transport and remounts were always available, even for the enormous forces raised later in the war, and there were some reserves to the Regular Army available, although not enough, and there were means of expansion for a big war.

This brings me to the present day and to the few changes which have been made in our organization and establishments since 1918. At the conclusion of the Great War we returned to the Cardwell system and seven years' service with the Colours and five with the Reserve. Our War Office organization had passed the test of war, and it remains practically unaltered, except for some changes in the division of duties between the Q.M.G. and M.G.O., of which you have no doubt read a good deal in the papers. These are due to the growing importance of mechanization. The same absence of change applies to the general organization of the Regular Army at home, which, however, has been very materially reduced in numbers. It is interesting to compare the figures which I have given to you in Table "B," as regards our military strength in 1899 and 1914, with those of the present day. Most of you probably do not realize that our Army, counting in every one, is 350,000 men weaker now than it was before the South African War. On the other hand, we have some tank battalions, some armoured car companies, and we have increased the number of our machine guns, while the mechanization of transport and other units is making progress. In the second line of our Army there have been two important changes. The Special Reserve, or Militia, has ceased to exist. There is, therefore, no reserve to the Regular Army at the present time beyond the Army Reserve. Secondly, the Territorial Army has accepted the liability for service overseas on general mobilization. It has thus become the Second Line, and there is nothing between it and the Regular Army.

Now, as regards our present commitments. So far as I can see, they are much the same as they have been in the past, only considerably greater owing to the expansion of the Empire, and with this difference, that the centre of strategic gravity has undoubtedly moved more eastward since the war.

We have to find a European garrison for India both for internal and external defence. We have to find a garrison for Egypt responsible for guarding the Suez Canal and for safeguarding our interests in Egypt. We have to find garrisons for the big ports, dockyards and fuelling stations on which our Navy is based and our trade depends. We have to find garrisons for some of the Crown Colonies and Protectorates, these being in some cases reinforced by Regular native troops and colonial Volunteer Corps. The self-governing Dominions and India have accepted the responsibility for their own defence, but in the event of a serious war they will require reinforcements to be sent to them from elsewhere. We

require the necessary ground support to the Air Force for the maintenance of the integrity of Iraq and Palestine. We require an Expeditionary Force of Regulars equipped up to date and with sufficient reserves that can be rapidly mobilized and sent to any part of the world at short notice to support those five points of possible danger which I have mentioned. We also require a force in the Second Line which, in the case of a big war, is capable of expanding and supporting the Regular Army across the seas within six months. This force would no doubt be supported, as in the case of the South African War and the Great War, by contingents from the self-governing Dominions and India, and would form our Imperial Army in the event of a big war.

From what I have just said it is obvious that our problem is an extremely difficult one, and also very different from the problem which the French or any other continental Army has to face. They usually have only one problem to work out. We have to be prepared to fight in every part of the globe and under the most varying conditions.

Now, as regards possible wars and probable enemies. I am not going to try to make you shiver. Small wars we may have, as in the past. As I told you, during the last century we had small wars in practically every part of the world—in West, East and South Africa, in India, in Burma, in Persia, in Arabia, in Egypt, in Somaliland, in China, and even in Canada. If you look at the map of the world now, and consider the possibilities of small wars, I think that you will agree that, except in the case of the North-West Frontier of India, the possibility of small wars has much decreased owing to the advance of civilization.

As regards more serious dangers, we have some definite indications on which to go. Western Europe is still exhausted after the Great War, and although now and again there are excursions and alarms, a big war in Europe seems unlikely for many years to come. We have fortunately refused to sign the Protocol which, as I read it, would have made us liable to be involved in any small war which might break out on the Continent of Europe. But by the Treaty of Locarno we have undoubtedly committed ourselves to fight either on the side of Germany or France, should either of them be wantonly attacked by the other. That is a definite commitment.

Then there are two factors on the Continent of Europe of which it is important not to lose sight in view of the future, and in military preparedness we must take the long view if we are not to fall into the errors of the last century. If populations go on increasing and

decreasing as they are doing now, the population of Germany in fifteen or twenty years will be something like ninety millions and the population of France will be thirty millions. The Germans have no outlet now for their surplus population, unless they lose their nationality in the United States of America or other countries. Moreover, Germany's defeat in the Great War still rankles in the German mind and will continue to rankle. It is just as well not to lose sight of this fact. Again, by the Treaty of Versailles, we set up in Europe a large number of small States which, like the Balkans, may prove to be a constant source of trouble. Those are the two things which, to my mind, may prove in fifteen or twenty years' time a serious danger to the peace of Europe, and we may get involved again.

Geneva and Locarno will undoubtedly help us to keep clear of war, but human nature unfortunately remains a constant factor, and the love of fighting is apparently an inherent part of human nature, and there always remain in every community the "Have nots" and the "Haves."

Moreover, Soviet Russia has not joined the League of Nations, and constructive peace is decidedly not her object. She is out, as she says herself, for world revolution, and with that object in view her first desire is to overthrow the British Empire, which she realizes is the chief obstacle to the attainment of her avowed objective. Therefore, a Russian advance into Afghanistan, with its accompanying threat against India, is a danger against which we are bound to make provision.

There are a few bed-rock principles which one has to remember when considering the rôle of the Army in Imperial Defence. They may seem to be platitudes, but at the same time I can assure you that they are often forgotten.

First, there is a limit in the expenditure of public money on armaments. This is obvious. To what extent this insurance premium can be lowered is for the Government and the Committee of Imperial Defence to decide, and also how it is to be divided between the three Services. History has shown frequently the danger of under-insurance, and history also teaches us that it is public opinion which largely governs the extent of our naval and military insurance.

Secondly, Great Britain and the Empire are dependent on the Navy for their very existence. If we lose our sea-power the Empire will cease to exist. The Navy, therefore, must come first and foremost in any general scheme of Imperial defence.

Thirdly, although France is not in the least likely to attack us, and the Germans at the present time are not allowed to keep a military Air Force, we cannot entirely ignore the possibility of an attack by air against our centres of industry and government in England, and in the next war, if and when it comes, we shall undoubtedly have to depend largely in the Army and Navy on the cooperation of the Air Force. Therefore, in the maintenance of forces for Imperial defence, the Air Force must receive its due quota, but there is no reason why it should have any more than its due quota.

As regards the Regular Army at home, as I told you just now, its strength has not been fixed on any strategical plan. It is fixed at the minimum strength at which it can find drafts and reliefs for garrisons in India and the Colonies. I think, then, you will agree with me that this is not a very satisfactory state of affairs. We ought to have some sounder basis on which to fix the strength of the Regular Army. At the present time we have to find the garrisons of the Rhine and Shanghai out of the Home Army. This shows you the very narrow margin on which we have to work as regards the strength of our Regular forces. Then again, with the disappearance of the Militia, or Special Reserve, there exists no source of supply of trained or even semi-trained men for the Regular Army beyond our reservists, and these are only enough to fill up the units on mobilization. This means to say that on mobilization for a big war, there are no trained men with whom we can make good the wastage in the Regular Army from the moment it mobilizes until the moment when the Territorial Army has been trained and is fit to go overseas. These four, five or six months as a rule are the critical periods of a big war.

Another important decision which will have to be arrived at is whether, in the case of a big war, we are going to fill the cadres of our Territorial formations with volunteers or by means of conscription—that is to say, whether we are going to go on trusting to volunteers, as we did in the Great War, until all the volunteers have joined up and then bring in conscription, or whether we are going to bring in conscription directly a big war starts. As regards this, I would only remind you of the gross inequality of the burden that fell in the last war on the men who went out to fight in France or in the other theatres of war on a shilling a day as compared with the men who stayed at home and worked in a factory or elsewhere in safety on £6 or £8 a week.

Those are three or four of the big questions of policy which concern us all, and which will have to be decided.

May I add one word in conclusion? One writer has lately described our military policy in the past as follows :

“ Our settled military policy throughout our history has been to reduce establishments well beyond any reasonable margin of safety in time of peace, and then on the outbreak of war, as a kind of forlorn hope, to send overseas the tiny striking force available. By this means we have gained time for the hasty raising and training of raw recruits inspired by the imminence and urgency of the crisis to come forward for the defence of their country.”

If you study the history of the last two hundred years, you must allow that, generally speaking, there is a good deal of truth in that criticism. It was probably the distrust of a standing army—which was looked upon as a dangerous weapon in the hands of Cromwell and the Stuarts—which may originally have been partly the cause of this policy ; but undoubtedly lack of foresight, the necessity for economy, and, still more, a lack of public interest in the Army, once the crisis had passed, were the true causes of the dangerous reductions made in the Army after the big wars of history—that is to say, after Marlborough's wars in 1713, after the Seven Years' War in 1763, and after the American War in 1783, and worse still, perhaps, after the big French Wars in 1815. Then came the Crimea and its grim awakening.

We are back again at the parting of the ways, it seems to me, just as we were after 1815. The country is tired of war. Trade and agriculture are in a bad way. Economy is forced upon us in every possible direction, and we are in danger of reducing our armed forces below the margin of safety. I cannot think, however, that we are going to fall into the errors of 1815 and afterwards. I say this because the general public is very much better informed and educated now than in those days, and interest in the Army has not ceased with the war, as it did after 1815. We went through, as a country, too much between 1914 and 1918 to forget quickly, and in those anxious years we can never forget that the people were the Army and the Army was the people.

As an Empire, we have vast responsibilities, and, as I read it, so far as the Army's share in its defence is concerned, it remains the projectile fired by the Navy. But the projectile must be large enough, it must be well manufactured, and it must be kept up to date ; and, what is equally important, when the time comes it must be aimed at targets which have been thought out carefully and well considered beforehand in times of peace.

TABLE "A."

LANDMARKS IN THE EXPANSION OF THE BRITISH EMPIRE.

DATES.	EVENTS.	BRITISH SOVEREIGNS.	REMARKS.
1558	Calais lost to the French. England's last foothold on the Continent till we captured Gibraltar in 1704.	Henry VIII. ¹ 1509-1547. Mary. 1553-1558. Elizabeth. 1558-1603	¹ Henry VIII. founded the Royal Navy.
1562	John Hawkins's first voyage to the West Indies.		
1578-80	Drake's journey round the world.		
1583	Newfoundland first taken possession of by Gilbert. ²		² 1575-84, Colonization advocated by Gilbert and others as counterpoise to the power of Spain and for the economic and commercial advantage of England. Attempts also made by Frobisher and others to discover the North-West Passage to the East.
1585	Raleigh's first attempt to settle Virginia. ³		³ Charter given to Virginia in 1606.
1588	Defeat of Spanish Armada.		
1596	Destruction of Spanish Fleet at Cadiz. ⁴		⁴ Portugal with its navy and overseas possessions was annexed by Spain in 1580 and remained attached to Crown of Spain till 1640.
1600	Charter given to East India Company to trade in East Indies. ⁵		⁵ Factories started at Surat, 1612; Madras, 1639; Bombay, 1662; Fort William, 1696.
1609	Bermuda occupied.		
1620	New England founded by the Pilgrim Fathers.		
1624-38	West Indian Islands (St. Kitts, Nevis, Antigua, Barbadoes, St. Lucia), Bahamas and British Honduras occupied.		
1628-36	Settlement of Massachusetts, Connecticut, Rhode Island, New Hampshire and Maine.	Stuarts. 1603-1649. 1660-1688.	
1651	St. Helena occupied by East India Company.		
1655	Jamaica captured from Spain.	Cromwell. 1649-1660.	Struggle between Blake and Van Tromp for command of the Channel, 1652-54.
1661-62	Gold Coast and Gambia occupied.		⁶ New York ceded by Holland to England by Treaty of Breda, 1667.
1663	Colony of Carolina founded.		
1664	Middle Colonies (i.e. those between Virginia and New England) captured from the Dutch.	⁶ William III. 1688-1702.	
1670	Hudson Bay Charter granted.		
1704	Gibraltar captured.	Anne. 1702-14.	

DATES.	EVENTS.	BRITISH SOVEREIGNS.	REMARKS.
1707	Union with Scotland.		
1713	Newfoundland, Nova Scotia, Hudson Bay Territory ceded by French by Treaty of Utrecht. ⁷	George I. 1714-27.	⁷ At the conclusion of the War of Spanish Succession, 1702-13 (Marlborough).
1739-63	The struggle with France and Spain for America and India, the trade with the Americas, and Sea Supremacy.	George II. 1727-60.	
1751	Conquest of India began. ⁸ Clive at Arcot.		⁸ Carnatic, Bengal and Mysore, 1757-1800. Mahrattas and Central India, 1775-1839. Nepaul, 1814-16. Sind and Sikh Wars, 1843-49.
1757	Battle of Plassey won by Clive.		
1759	Capture of Quebec by Wolfe.	George III. 1760-1820.	⁹ At the conclusion of the Seven Years' War, 1756-63. (Elder Pitt, Prime Minister.)
1763	Canada, West Indian Islands, French possessions in West Africa and India ceded by French by Treaty of Paris. ⁹ Also Florida by Spain.		
1769-75	Australia discovered by Cook.		
1776	Declaration of American Independence.		
1783	American Colonies lost.		
1787	Sierra Leone became a Colony.		
1788	New South Wales colonized. ¹⁰		¹⁰ Followed by Tasmania, 1812; W. Australia, 1829; S. Australia, 1834. New South Wales included Queensland till 1840 and Victoria till 1851.
1795	Cape of Good Hope taken from Dutch. ¹¹		¹¹ Purchased in 1814.
1795	Ceylon taken from Dutch. ¹²		¹² Ceded by Treaty of Amiens.
1800	Malta captured from French.		1793-1802 } French War.
1814	Mauritius, Ionian Islands, Malta, St. Lucia, Tobago ceded by Treaty of Vienna.		1803-1815 } Younger Pitt Prime Minister, 1783-1806.
1819	Singapore acquired. ¹³		¹³ Straits Settlements (Singapore, Penang, Malacca) transferred from Indian Government to S. of S. for Colonies as a Colony in 1867.
1824	Conquest of Burma began. ¹⁴		¹⁴ Continued in 1853, 1886
1837	New Zealand annexed.	Queen Victoria, 1837-1901.	
1839	Aden occupied.		
1841	Hong Kong ceded by China.		
1842	Natal occupied and declared a Colony.		
1846	Final settlement of boundary between Canada and U.S.A.		
1857	Indian Mutiny.		
1867	Canada became a Dominion.		

RÔLE OF THE ARMY IN IMPERIAL DEFENCE 253

DATES.	EVENTS.	BRITISH SOVEREIGNS.	REMARKS.
1869	Suez Canal opened.		
1879	Conquest of Zululand.		
1882	British control over Egypt established.		
1884	Somaliland became a Protectorate.		
1886	Niger Company granted a Charter. ¹⁵		¹⁵ Became a Protectorate in 1900.
1888	Chartered Company of British East Africa formed. ¹⁶		¹⁶ Became a Protectorate in 1895. Became Colony and Protectorate of Kenya in 1920.
1890	Chartered Company of South Africa formed.		
1891	British Central Africa became a Protectorate.		
1894	Uganda became a Protectorate.		
1898	Soudan occupied.		
1900	Australia became a Dominion.	King Edward VII., 1901-1910.	
1907	New Zealand became a Dominion.		
1910	South Africa became a Dominion.	King George V., 1910.	
1919	Iraq, Palestine, German East and West Africa taken over as mandatory territories.		

TABLE "B."

LANDMARKS IN THE EVOLUTION OF THE BRITISH ARMY.

DATES.	EVENTS.	REMARKS.
1660	The Regular standing Army dates from the Restoration of Charles II. ¹	¹ By 1685 it consisted of 16,000 men. Grenadier and Coldstream Guards, Royal Scots, The "Queens," The "Buffs," The King's Own, 5th Fusiliers, 6th Royal Warwickshire Regt., Royal Horse Guards, 1st and 2nd Life Guards, The Royals, Scots Greys.
1702-13	War of Spanish Succession. Blenheim, 1704. ² Ramillies, 1706. Oudenarde, 1708.	² Marlborough had under him 11,000 British; 39,000 Allies.
1741-48	War of Austrian Succession. Fontenoy, 1745.	
1756-63	Seven Years' War. Minden, 1759.	
1775-83	War with the American Colonies.	
1793	Peace strength of the Regular Army at its normal level of 17,000 at home.	
1794	Pitt had raised the Army to 175,000 British Regulars and Mercenaries, and 90,000 Militia, ³ Fencibles and Volunteers.	³ Militia had been embodied in 1792, and enrolled by ballot by Counties. Substitutes were allowed.
1802	Peace of Amiens.	
1803	Napoleonic War began. Strength of Regular Army 98,000, of whom 39,000 at home. 52,000 Militia. Number of Volunteers for Home Defence had risen to 463,000 men. ⁴	⁴ The difficulty was to get men to fill up the Army abroad.

DATES.	EVENTS.	REMARKS.
1805	Pitt's "Additional Forces Act" by which he raised 2nd or Reserve Battalions for Regular Regiments. Each Regiment had a Militia Battalion attached to it for recruiting. ⁶	⁶ Pitt's policy was to make the General Militia feed the Regular Army. 27,000 Militiamen were transferred in 1807-08. Militia recruits had had at least 1 year's training before transfer, and were thus better than direct recruits. He also thereby encouraged County connexions.
1808	Local Militia raised by ballot without substitute as reserve for Home Defence. For Sir John Moore's campaign in Spain and Portugal we had therefore:	
	(1) Standing Army—Linked Battalions and Depots. ⁶	⁶ Up to 1806 service had been for life; after 1806 it was Infantry 7 years, Cavalry 10 years, Artillery 12 years,
	(2) Reserve — General Service Militia (embodied in 1792).	
	(3) Home Defence—Local Militia, Fencibles and Volunteers.	
1809	Commencement of Wellington's Campaign in the Peninsula. ⁷ Strength of British Forces:	⁷ Population of United Kingdom was then 15 millions.
	Regulars and General Militia ⁸ 280,000	⁸ Distributed as follows:
	Local Militia and Volunteers 390,000	Mediterranean 22,000
	Seamen and Marines 130,000	West Indies 21,000
	Total 800,000	East Indies 20,000
	Divisional Organization introduced.	N. America 8,000
1811	Ballot abolished for General Militia.	Ceylon 5,000
		Cape of Good Hope .. 6,000
		New South Wales .. 1,300
		Madeira 900
		Portugal 23,000
		On passage 4,000
		Total abroad 110,000
		At home 105,000
		General Militia 65,000
		Total 280,000
1811	Strength of Peninsular Army—2 Cavalry Divisions, 8 Infantry Divisions (including Light Division), ⁹ and 1 Portuguese Division. Officers' promotion by purchase.	⁹ The British Army included many foreign mercenaries—King's German Legion (5 Cavalry, 10 Infantry Battalions), raised in Hanover, Brunswick jägers, Chasseurs Britanniques.
1815	Waterloo. British numbered 25,000 out of total of Wellington's Army of 95,000.	
1816	Volunteers had disappeared. Laws for raising Militia in abeyance.	
1821	Army down to 101,000, of whom 31,000 in Colonies. ¹⁰ 19,000 in India.	¹⁰ Stationed at:
1852	Militia re-raised, but by volunteering, the ballot being suspended.	Gibraltar, Malta, Ionian Islands, West Coast of Africa. Cape of Good Hope, Mauritius, Ceylon, N.S. Wales and Van Diemen's Land. Canada, Nova Scotia, Newfoundland, Bermuda, Jamaica, Honduras, Bahamas, Windward and Leeward Islands.

RÔLE OF THE ARMY IN IMPERIAL DEFENCE 255

DATES.	EVENTS.	REMARKS.
1854	Strength of Army had risen to 140,000 owing chiefly to convulsions in Europe in 1848-49. 40,000 in Colonies. ¹¹ 31,000 in India. 70,000 at home.	¹¹ Including garrisons in New Zealand, Hong Kong, Aden and St. Helena.
1854	Crimean War: ¹² No Reserves of any kind except 25,000-30,000 Militia, who were not allowed to transfer, and 10,000 pensioners. Officers' promotion by purchase. Military Administration very weak. ¹³ For the last time resort was had to foreign mercenaries.	¹² Strength of the Army in the Crimea 28,000-30,000, organized in Divisions (1 Cavalry and 5 Infantry). ¹³ Army in 1854 was administered and controlled by:— S. of S. for War and Colonies (control of Army in War time). Secretary at War (Finance). Commander-in-Chief (responsible for Infantry and Cavalry). Major-General and Board of Ordnance (responsible for Artillery and Engineers). Treasury (under whom was the Commissariat). Board of General Officers for inspection of clothing. Militia and Yeomanry were under Home Office, when not embodied.
1855	A "Secretary of State for War" was appointed to take over the Military work of the Secretary of State for Colonies and of the "Secretary at War." ¹⁴ The Militia and Yeomanry were transferred from control of Home Office to that of the War Department. The Board of Ordnance was abolished and its duties divided between the C.-in-C. and the War Department. The Commissariat was taken from Treasury and put under the War Department.	¹⁴ The Secretary of State was given a soldier junior to the Commander-in-Chief as Under-Secretary of State. This resulted in diarchy: The S. of S. at the War Office, and the C.-in-C. at the Horse Guards, who dealt with each other by correspondence.
1857	Indian Mutiny.	
1858	Staff College established.	
1859	India came under the Crown. East India Company's European troops absorbed in British Service.	
1864-66 1870-71	{ Prussian successes roused the British public to a keen interest in military matters.	
1868-74	Lord Cardwell Secretary of State.	
1870	Horse Guards brought under one roof with War Office. The War Office was divided so as to work in three big departments: (1) Military—under C.-in-C. (2) Supply—under Surveyor-General. (3) Finance—under Financial Secretary.	

DATES.

EVENTS.

REMARKS.

	"Army Enlistment Act" brought in Short Service (total 12 years—part with Colours, part with Reserve) and an Army Reserve.		
	Garrisons of the Colonies reduced, so as to have more units at home and thus equalize the number of battalions at home and abroad.		
1871	Abolition of promotion by purchase. First Autumn Manœuvres held. Regular troops were withdrawn from Canada.		
1872	The Militia were taken away from Lord-Lieutenants and placed under Commander-in-Chief. Regular Battalions linked in pairs. Country divided into 66 Military Districts, which did not include the Guards, Rifle Brigade and 60th. Each District included 2 Line Battalions, 2 Militia Battalions and the Volunteers in the area. Each Regular Battalion had 2 Companies at the Depot.		
1873	Intelligence Department formed.		
1881	Linked Battalions lost their numbers. Flogging abolished in the Army.		
1882	Egyptian War. First employment of short-service Army with reserves.		
1886-88	Scheme for Mobilization for War took shape, but not completed by 1899. ¹⁵		¹⁵ Mobilization section was not taken away from the Director of Military Intelligence and placed under C.-in-C. until 1895.
1888	Mr. Stanhope laid down that Regular Army existed primarily for Home Defence.		
1899	South African War. Establishments were : Regular Army, ¹⁶ 249,000—India, 73,000. Colonies & Egypt, 51,000. Home, 125,000. Army Reserve, 90,000 Militia, ¹⁷ 130,000 (including Militia Reserve. ¹⁸) Yeomanry, 12,000 Volunteers, 265,000 Total . . . 750,000 ¹⁹ For Home Defence— Cavalry Reserve Regiments Provisional Battalions Garrison Battalions Militia embodied. Volunteers given training and embodied. ²⁰		¹⁶ Between 1st of August, 1899, and 31st of May, 1902, 228,000 Regular officers and men were sent out to South Africa as result of the Cardwell reforms. ¹⁷ Not liable for service overseas. ¹⁸ Militia Reserve abolished in 1903. ¹⁹ These are the figures given by the Royal Commission in 1902. ²⁰ 45,000 Militia, 36,000 Yeomanry in 3 contingents, 20,000 Volunteers (C.I.V. and Special Service Companies) were sent to S.A. during the war.
1902	Royal Commission on S. African War.		
1903	Norfolk Committee on Militia and Volunteers.		

RÔLE OF THE ARMY IN IMPERIAL DEFENCE 257

DATES.	EVENTS.	REMARKS.
1904	Esher Committee.	30,000 Colonials and 52,000 men raised in S.A. also took part in the war.
	Formation of the Army Council. ²¹	²¹ 1st Mil. Member—Chief of Staff (Military policy in all its branches).
	Appointment of C.-in-C. abolished.	2nd Mil. Member—Adjutant-General (Personnel and discipline).
1905	Acceptance of Committee of Imperial Defence as an indispensable part of machinery of Government, with permanent Secretariat.	3rd Mil. Member—Quartermaster-General (Supply).
	Lord Haldane became S. of S. for War, December, 1905.	4th Mil. Member—Master-General of Ordnance (Armament and Fortifications).
1906	General Staff formed under Chief of General Staff, under whom were to be 3 Directors for: (1) Military Operations, (2) Staff Duties, and (3) Military Training.	Under-Secretary of State. Financial Secretary.
1907-08	Expeditionary Force of 6 Divisions and 1 Cavalry Division organized. 150,000 men. ²²	²² Of whom 50,000 regulars, 70,000 reservists and 30,000 trained on a Militia basis.
	"Militia" became "Special Reserve" to supply drafts for Regular Army in war. Nucleus of 3rd Battalion stationed at Depot in time of war.	
	Expansion for big war provided for by the organization of a Territorial Force of 14 Divisions and 14 Cavalry Brigades, from the Volunteers and Yeomanry, ²³ organized on the same lines as the Regular Army.	²³ County Associations to be largely responsible for raising and administering these.
	O.T.C. organized for the training and supply of officers for the T.A. and Reserve of Officers and to furnish a potential supply of officers with some military training in case of a big war.	
	The formation of a Supplementary Reserve of Officers.	
	The Dominions asked to cooperate.	
	Chief of General Staff became Chief of Imperial General Staff.	
1914	Great War.	
	Regular Army { India 75,000 Colonies 33,000 Home 125,000 1 Squadron R.F.C. } 233,000	
	Army Reserve (including Section D)	145,000
	Special Reserve (old Militia)	64,000
	Territorial Army (including Yeomanry and T.A. Reserve) ..	272,000
	Channel Islands and Malta Militia ..	5,000
	Total	719,000

DATES.

EVENTS.

REMARKS.

Raised during the War :

In England	4,000,000
Wales	270,000
Scotland	560,000
Ireland	130,000

Grand total .. ²⁴ 5,679,000

The above joined the Regular,
New or Territorial Divisions.²⁵

Recruited in Canada ..	630,000
Australia	420,000
New Zealand	220,000
S. Africa	140,000
Newfoundland	11,000
Other Colonies	12,000

²⁶ 1,433,000

There were in the
Indian Army in

1914— 240,000 Indians.

Recruited during
the War— 1,160,000 „

Total .. ²⁷ 1,400,000

Other Colonial Troops, 120,000.

Total men raised before and during
the War for service in the Imperial
Armies, 8,650,000.

1927

Present strength of our Forces (figures
for 1st of July, 1927) :

Regular Army	{ India 57,000 Cols. 28,000 Home 94,000 }	179,000
Army Reserve	..	85,000
Militia Cadre—Officers		323
Territorial Army (with Yeomanry)	..	154,500

Total 418,500

Supplementary Reserve of
Officers

15,430

O.T.C. (1st of April,
1927) :

Senior Officers	..	181
Cadets	..	4,500
Junior Officers	..	670
Cadets	..	<u>33,500</u>

²⁴ As well as this it is often forgotten by our Allies and the Dominions that we also found the men for the Royal Navy, Mercantile Marine, and most of those for the Air Force, and officers for the Indian Army and various Irregular forces.

²⁵ There were organized before and during the War :—

11 Regular Infantry and 3 Cavalry Divisions.

31 New Divisions.

25 Territorial Divisions.

—

67

²⁶ There were 10 Dominion Divisions

²⁷ There were 10 Indian Divisions.

“AUT CURSU, AUT COMINUS ARMIS”

BY LIEUT.-COLONEL G. F. BROOKE, D.S.O., M.C., *p.s.c.*

CAVALRY must move with the times, and times move quickly in these scientific days. The manœuvres of 1927 have not only reinforced the established principles of war, but, at the same time, have exposed the limitations of each arm.

Every cavalry officer must be thinking, and thinking deeply, of the future of his own arm. Deep thinking produces a philosophical, analytical and logical mind : a mind that can reason, contend with difficult problems and produce sound solutions. On the solutions arrived at by those in authority, a definite policy is eventually produced, but the reasoning of us junior ranks will at any rate have stimulated our imagination and brought us wisdom.

Already we have experienced considerable reductions both as regards regiments and squadrons on the home establishment. Once this precedent has been started, we cannot but help feeling apprehensive about further exploitation in this direction. We have heard it said, “ That we live in a fool’s paradise. We have seen the horse driven from the road by the motor-car ; already our transport has been mechanized (and rightly so), and soon our horses will go.” Well, as soon as it is definitely proved that it is sound to replace the horseman by mechanical vehicles, let us do so. No one who appreciates the horse desires his wholesale destruction in war. If he is of no use, why retain him ?

We must, however, remember that roads, and highly improved roads, have been made for mechanized vehicles. But once off the road, as the country becomes more difficult so does the mobility of the horse proportionately exceed that of machines.

In war roads are easily destroyed, and in any case they soon deteriorate. Bad weather sets in, and the movement across country by other than horsemen and infantry becomes well-nigh impossible.

Again, in the sand drifts of the desert, the rocky kopjes of Africa, the roadless steppes of Russia, the mountainous country of Palestine, and in the rough woody country of the Ardennes, the horse has

the advantage. One must guard oneself, therefore, against being over-enthusiastic or from advancing exaggerated claims on behalf of mechanization based upon movement over open country like Salisbury Plain or the Berkshire Downs, both ideal theatres for their operations.

This is said in no carping spirit, but merely to emphasize the facts that no arm is independent of the other, and that the closest cooperation between all is the surest road to efficiency.

Doubtless the commander and staff of the Mechanized Force in the recent manœuvres have appreciated both these facts in face of the difficulties against which they had to contend. At the same time cavalry soldiers are now fully convinced of the undoubted and powerful effect of a mechanized force, ably commanded, once it has been successfully launched in an attack.

Certain ill-informed writers this autumn referred to the cavalry in France between 1914 and 1918 as being a first-class nuisance, except dismounted to assist the hard-pressed infantry. But only those who are entirely ignorant of the true facts of the case could accept this deposition, and naturally there are some who view war on a very narrow horizon.

There are certain phases of war when decisions can be reached, and at other times there are static periods when no great results can be obtained. This has been the case in previous wars, and in the Great War these latter periods extended over months and years.

Decisions can only be reached when the operations are mobile, as they were in France in (a) in 1914-1915 in the early stages of the war prior to the formation of continuous trench lines, and (b) in the final advance in 1918.

In the case of (a), without the presence of the British and French cavalry on the battlefield, it might have been a very short war, and indeed these early operations brought out most conspicuously how each arm was dependent on, and relied on, the others. Those who took part in the retreat from Mons can fully appreciate the facts of the case.

In the case of (b), the fact that the Armistice was signed by the Germans prevented a complete military decision, and yet it was for this final decision that Lord Haig had retained his cavalry—to reap the full fruits of victory.

It might be inferred from the writings of some irresponsible persons that it was not worth while retaining the cavalry during the period of stationary warfare. But those who inquire will find that practically every part of the line at one time or another was held by

the cavalry in an emergency. Then again, although large numbers of the cavalry were lost holding the thinly held defences of the Fifth Army in March, 1918, the men died fighting in the line, a fact borne out by the abnormally small numbers of prisoners captured. Those who remained were remounted and, as a mobile reserve, pushed into the line at critical points. Weak in numbers, with practically no artillery support, the cavalry counter-attacked at Moreuil Wood and Rifle Wood, successfully driving back the enemy. In proof of the value of the work done by our cavalry in France one need only cite the opinion of Marshal Foch. In a letter written to General Seely, commanding the Canadian Cavalry Brigade, the marshal refers to the Canadians, but British cavalry, including the writer's own regiment, were fighting with them. One of the writer's own squadrons came out of Moreuil Wood with only one officer and a squadron-sergeant-major.

"Je n'oublie pas l'héroïsme de la vaillante Brigade de la Cavalerie Canadienne. Au mois de mars, 1918, la bataille était aux portes d'Amiens. Il s'agissait de maintenir à tout prix l'union intime de nos deux armées. Le 30 mars à Moreuil, le 1^{er} avril à Hangard en Santerre (Rifle Wood) elle réussit, par son magnifique entrain et son élan offensif, à tenir l'ennemi en échec et à briser définitivement son élan. En grande partie, grâce elle, la situation, angoissante au début de la bataille était rétablie."

Again, a study of Lord Allenby's campaign in Palestine brings home the possibilities and inevitable effect of properly handled cavalry achieving decisive results.

Conditions have not entirely changed since those days, though the rôle of cavalry may be somewhat modified.

It is not surprising that as a result of over three years of inconclusive static warfare, with its heavy toll of lives and treasure, the modern military school of thought should insist on the necessity of maintaining the power of manœuvre. The work achieved by our tanks in France during the late war naturally appears to provide the means of doing this. But one must be careful not to take an exaggerated view, or to allow the nation to be hoodwinked by too optimistic enthusiasts in the press into the belief that mechanization will provide us with a solution of all our military problems.

Every one agrees that a well-organized and up-to-date mechanized force is an indispensable and formidable weapon of war and a powerful auxiliary to infantry and cavalry. Though armoured fighting vehicles are still in the experimental stage, they undoubtedly

possess three attributes : fire-power, mobility and armoured protection. The rôle of this force is to carry out a concentrated offensive action against a definite objective. It is too valuable an asset to be wasted on secondary tasks. The late war taught us the futility of employing tanks except when concentrated and well supported by artillery. Though tankettes, armoured cars, mechanized machine guns and artillery may be used in conjunction with tanks, the rôle of the mechanized force remains the same and conditions of its employment are similar.

The mobility of this force enables it to carry out wide turning movements which are not possible for other arms. Its power to demoralize the enemy is incalculable, although its actual destructive power is hard to determine, and it cannot be reckoned on as a means of capturing prisoners. It can easily break through ordinary field works, and its presence on a battlefield deprives the machine gun of its former domination. The rôle of the force is essentially offensive. In future wars against one great Power we must anticipate a hostile mechanized force which has a similar rôle. Obviously, if threatened by such a hostile force, possibly on our flank, it would be undesirable to withdraw our own mechanized force from its proper rôle in order to defend the threatened flank. Consequently, the other arms will have to depend upon their own means of defence, namely, artillery and cavalry on the threatened flank equipped with mobile anti-tank weapons.

In offensive action the limitations to the usefulness of a mechanized force can be eliminated to a large extent by the employment and cooperation of other arms.

(a) Infantry can be used to support the tank attack, to consolidate positions gained, to capture prisoners and to deal with the disorganized enemy. There is little doubt that, in any theatre of war in which the British Army may be called upon to operate in the future, our infantry will have to be employed as heretofore, for neither climatic conditions nor the difficulties of terrain will prevent this arm from operating by day or night.

(b) Cavalry, after its usual reconnaissances and protective work, can increase the confusion after a successful tank attack, by pursuing, killing and capturing the retreating enemy.

But enthusiasts who appear to imagine that all the difficulties of warfare will be overcome by the complete mechanization of our Army would do well to bear in mind some of the obvious limitations of a mechanized force. Such a force when employed on a wide turning movement, for instance, must utilize the roads unless its

radius of action and speed is to be considerably limited and risk of breakdowns increased by long marches across country. Moving by day under these conditions it is easily detected and vulnerable from the air. Moving by night its speed is again impeded.

It is liable, too, to be raided by the enemy's bombing aeroplanes or to be shelled by hostile artillery if it has to be concentrated in the forward area. The difficulties of concealment both from air and ground reconnaissance are considerable. In France the tanks moved up, previous to deployment for attack, behind a continuous trench line. They could move in their own time, and could only be detected from the air when moving by daylight, or possibly in the latter stages of their advance by their noise, which, however, could be drowned by aeroplane engines and artillery fire. They were thus usually immune from attack during their advance up to the line. But such conditions do not exist in mobile warfare. During the approach march, if located on a difficult road from which to deploy, the column may be subjected to attack and artillery fire.

Though tankettes or some sort of light tank might be employed for the close protection of the column, even a weak hostile mechanized force might be able to break through these and get within artillery range of the main column on the road.

It must not be forgotten that tanks can be mined, and that it is not easy for those in charge of them to discover where mines have been laid. When they are fully closed down for protection against small-arm fire, the range of vision of the crew is much restricted in the present type of tank.

Taking into consideration the above points, it is obvious that a mechanized force, whose strength must be husbanded for the main effort, requires the same protection as do the other arms.

How can this best be found ?

It may be suggested that on the move, some form of tankettes with armoured cars can fulfil this mission.

Let us consider the problems of an advanced guard and the necessary independent reconnaissances.

The main body requires not only that hostile bodies shall be driven back to avoid delay, but also that it should be given early warning of hostile dispositions, strength and movements, and at times reports on physical features, bridges, mined areas, etc.

Much of this entails continuous observation and an uninterrupted flow of information back. To a great extent under suitable conditions this may be done by aeroplanes and armoured cars, but it would be foolhardy with such a valuable force to depend entirely

on these. The larger the force, the wider the front within the domain of the advanced guard. Also it must be, as far as is humanly possible, certain that the protective troops can reach all points of vantage, searching woods, crossing sunken roads, negotiating moderate-sized rivers and climbing steep hills. Can tankettes and armoured cars do this? Are tanks best employed scattered on a wide front? The front may become very wide when opposed to a hostile mechanized force. Is it the correct employment for tankettes? Is it desirable to be continually sending back armoured vehicles with information, when most of the information must come back across country? Is it logically sound to employ armoured fighting vehicles on seven-tenths of your early and negative reconnaissance? Would they not best be concentrated only where resistance is met?

To observe without being seen or heard is the best method for a patrol to obtain information—stationary observation from a commanding position, making full use of glasses. This is how the best information is obtained in mobile war, although it may often entail fighting. After an action, bold and intelligent patrols will get the opportunity of gaining the required information.

Can cavalry carry out the rôle of reconnaissance and protection of a mechanized force?

It must be clearly understood that (a) independent reconnaissance and (b) protective reconnaissance are two separate rôles, and that separate troops will be allotted for each.

(a) *Independent reconnaissance*.—This must be subdivided into (i) distant reconnaissance by R.A.F.; (ii) medium reconnaissance by armoured cars generally wide on the flanks; and (iii) close reconnaissance by cavalry.

All these forms of reconnaissance are required by any force, mechanized or otherwise, and must be employed in addition to protective reconnaissance.

In the absence of suitable roads, or owing to bad weather, cavalry must be prepared to carry out all three.

Further, it must be remembered that cavalry can interrogate inhabitants and take prisoners, and thus can obtain identifications which may be of considerable importance.

To carry out its duties satisfactorily, cavalry must be prepared to be out all night and often to subsist on the country in order to piquet continuously and report.

This reconnaissance work is one of the essential rôles to be

fulfilled by cavalry, and, once contact has been gained with the enemy, armoured cars are best withdrawn for other employment.

(b) *Protective reconnaissance*.—At first sight it would appear that the flank protection of a mechanized force carrying out a wide turning movement could not be carried out by cavalry. But if we consider the problem we find that this would not be the case, because the movements of the force, although covering great distances, would be through the strategic area and clear of the tactical.

Any two sides of a triangle are greater than the third. The wider the turning movement, the more acute is the apex of the triangle and the shorter the base.

Cavalry would be on the base or inner flank of the force and thus in a position to delay the enemy and to give ample warning to the force covered. Further, it is likely that some of the march of the column would be by night, thus limiting its distance and speed. Cavalry would thus be able to compete with the distances required, while armoured cars would be utilized for long-distance patrolling. Any baggage which was not actually required on the move by the cavalry could be carried on mechanized vehicles.

Let us now consider the problems of an advanced guard to a mechanized force.

The force must be secured from surprise, *i.e.* unexpected artillery fire; it must be supplied with early information; and its advance must not be delayed. Our object is to secure protection with economy of force, so that this formidable fighting machine may strike with all its strength at the vital point. In addition, the advanced guard must be strong enough to drive back hostile reconnaissances.

Obviously, this form of advanced guard must be found either by (a) tankettes, armoured cars and mechanized artillery; or (b) cavalry; or (c) cavalry, armoured cars, plus tankettes and mechanized artillery.

(a) This form of advanced guard could no doubt overcome such resistance as it is likely to meet, and yet the following considerations should be borne in mind.

(i) The present tankette has its limitations. It cannot be depended upon to move across country negotiating successfully obstacles such as sunken roads, ditches, difficult woods, steep hills and small rivers, so as to be certain of reaching definite tactical points which must be searched and occupied during the advance.

It is tolerably certain, therefore, that much ground which should be reconnoitred will be omitted.

(ii) It is unsound and uneconomical to disperse tankettes over a frontage of three to five miles, when their concentrated effort might only be required on a much more limited front.

(iii) As during an approach march seven-tenths of the reconnaissance information will be negative or merely reports of the movements of small hostile patrols, it surely cannot be sound to employ A.F.V.'s on such work when they might be better employed to overcome resistance at selected points.

(iv) It is uneconomical to send back A.F.V.'s with information if there is any other means of doing this.

(v) It is only reasonable to anticipate a certain amount of mechanical breakdowns if tankettes are employed on reconnoitring duties across difficult country; and consequently they will not be available for fighting purposes. Even if it is admitted that the light types of tank can overcome most obstacles, they consume a great amount of petrol and are not suitable instruments for the purposes of reconnaissance, in which eyes and ears and the closest and unbroken observation are required.

With regard to (b), cavalry can undoubtedly carry out the rôle of protective reconnaissance. Men mounted on horses can be controlled and can be trained to operate on a wide front. They can cope with ordinary obstacles other than barricades and barbed wire entanglements under hostile fire. They can search woods and copses and surmount steep hills with the minimum of delay.

They can send back messengers to report, while the remainder of the patrol continues to observe, to push on, or to work round the enemy's flanks. They can hold positions once gained by dismounted fire. They can detect places where roads have been mined for tanks. They can drive back hostile patrols and seize hostile observation points. But armed as they are at present they cannot consolidate a position or break down resistance as rapidly as tankettes.

Cavalry machine guns are carried in vehicles which are tactically cumbersome, and although it can eventually bring into action considerable fire-power, when supported by the R.H.A., its offensive operation is more complicated than that of the tankette.

In the case of (c), where cavalry is used in cooperation with tankettes, armoured cars and mechanized artillery, the disadvantages enumerated in (a) and (b) disappear and the efficiency for which we are in search is obtained. There is the desired economy of force and also the concentration of strength where and when it may be

required. With such a combination a commander of an advanced guard can dispose of his normal allotment of reconnaissance troops, and is ready to support them as required on each sector of his front with his tankettes, supported in their turn by mobile mechanized artillery. He also has in hand mounted troops to push home an attack, to turn a flank or to carry out a pursuit.

His tankettes are not employed on negative missions ; his messages are sent back by despatch riders ; and he can find, hold and hit his enemy.

Each unit is thus fulfilling its proper rôle, and the commander controls a force which is free to disperse if it happens to be attacked from the air.

A force which is protected in this way is secure and mobile.*

All its units, however, would have to be highly trained and its leader a man of quick decision.

There can be little doubt that cavalry, in cooperation with tanks, will get the opportunity of destroying and rounding up prisoners, raiding headquarters and lines of communication. Cavalry with a “ mechanized stiffening ” is an indispensable form of mobile protection to a mechanized force.

There are certain points to bear in mind with regard to a protective force of this kind, assuming that it is a cavalry brigade :—

- (1) (a) The load on the horses must be lightened to the last degree, and therefore nothing except what is actually required for fighting must be carried on the horse. One form only of *arme blanche*, either sword or lance, must be carried. Greatcoats, horserugs (when required), wallets, picketing gear, must be carried on six-wheelers and brought up when required. One bandolier only must be carried by the horseman, and either a lighter type of rifle or bucket must be provided. The rifle might be carried slung on the man, but this would require careful experiment as the present pattern rifle weighs nine pounds.
- (b) The highest standard of horsemanship must be attained so that men can cross difficult country without hesitation.
- (c) Horsemastership must be studied most carefully, for only in this way can cavalry depend upon tackling the increased radius of action that will be demanded of them in this form of warfare. Marches up to fifty miles with

* The tankettes might enable a commander to employ exhaust smoke in addition to fire-power. For a rapidly moving arm smoke is not required in the same density, or for so long a period, as is required by infantry, and its employment in an operation of this nature might prove a most important factor.

lightened loads will have to be carried out without loss of efficiency.

(d) Scouts who should be thoroughly proficient in night work must be trained, because night marches are likely to be much more frequent in future wars.

(2) As artillery is to be mechanized, mobility will be increased and road space reduced.

(3) Machine guns and anti-tank guns should be borne on some type of tankette. When moving across difficult country, mounted troops must be prepared to reconnoitre suitable routes for these vehicles.

(4) The field troop, R.E., should be mechanized.

(5) A cross-country R.T. tender is necessary for continuous communication with the air, and four (six-wheeler) wireless sets to a brigade will be required to speed up communication.

(6) Armoured car companies (six-wheelers) are essential for wide flank reconnaissance.

Owing to the risk of an attack from the air, all fighting units of a cavalry brigade should be capable of dispersion and of moving independently of roads.

A cavalry brigade, constituted on the above lines, would be capable of giving protection to a force of all arms against a hostile mechanized force, but to be really efficient it would have to be supplied with definite anti-tank weapons.

It is suggested that twelve such weapons should be carried in the tankettes, and that two six-gunned mechanized batteries of the Birch type, including a section of howitzers which can move speedily across country and come rapidly into action, should be employed with the brigade. They could be utilized also for anti-aircraft defence.*

Sufficient fire-power would thus be available to delay a hostile mechanized force, or to render it impossible for the enemy to break through the protective screen in order to develop a rapid attack on the column. An advanced guard of this kind would also possess the mobility for a rapid withdrawal, leaving patrols out to piquet the hostile force.

The field troop, R.E., accompanying such a force would be required to carry an ample supply of anti-tank mines and gun-cotton primers.

These mines are portable on a horse, and cavalry troops should

* A proportion of the tanks with the main force would also be available. See "Tank and Armoured Car Training, 1927."

be trained in laying them. As a rule the difficulty is to mine selected points in an area in sufficient time. This can best be overcome by dispersing the necessary troops to the selected points to lay the mines simultaneously.

The use of gun-cotton primers is the quickest and most efficient method of cutting down telegraph poles and trees and thus barricading roads against mechanized vehicles.

If cavalry is equipped in this up-to-date manner it will certainly be required for the purposes which have been set out in this article, and, in addition, it will be needed for rearguard duties, as a mobile reserve, and to act in close cooperation with infantry at all times.

Unfortunately, increased efficiency generally entails further expenditure, but there is no doubt that a "two sabre-squadron" regiment has not the tactical resource of a "three." It is not possible to ring the changes and to relieve squadrons or to retain one squadron in hand.

There is no disguising the fact, too, that an infantry division requires a regiment of cavalry instead of a squadron to meet efficiently the demands which are made for mounted men.

A cavalry brigade headquarters with a corps further increases efficiency, as it can arrange reliefs, the interchange of regiments, if necessary, and other domestic details.

* * * * *

In order to appreciate the necessary standard of mobility required of cavalry the following figures may be of interest: The average speed of a company of tanks moving across country with no serious obstacle is 6-7 m.p.h.; on the road by day its speed is 7-8 m.p.h.; and on the road at night with headlights, 6 m.p.h.

It is obvious that a mechanized force can continue marching longer than horses. But it must be remembered that at times it would be necessary to march without headlights at night in order to avoid attack from the air. In such circumstances the pace of the mechanical vehicles would be decreased.

Long marches across difficult country would also reduce their pace, and mechanical breakdowns would be more frequent.

It would be out of place here to give statistics of mechanical breakdowns after the last Southern Command manœuvres, but it was out of all proportion to horse casualties, and the 2nd Cavalry Brigade was prepared and ready to take part immediately in the operations against the Aldershot Command, which were unfortunately cancelled.

In war one must anticipate difficult conditions and an intricate terrain which the enemy will be able to make still more awkward for a mechanized force. For this reason horsemen should be employed as far as is possible to obviate the inevitable loss or delay due to mechanical breakdowns and repairs.

No thinking soldier in any way wishes to deny the potential attributes of a mechanized force. It is a means to an end—that end being the destruction of the hostile army. But to fulfil this rôle the cooperation of all arms is essential, and this should be the aim of all training. The various arms should learn to work together, and this can only be brought about by the officers of each arm getting to understand and to appreciate the powers and limitations of the other arms.

THE RECENT CHANGES IN THE ADMINISTRATIVE ORGANIZATION OF THE BRITISH ARMY

BY LIEUT.-GENERAL SIR GEORGE MACMUNN, K.C.B., K.C.S.I.,
D.S.O.

THE discussion which has recently taken place in *The Times* and other newspapers has served to draw considerable attention to a rearrangement of duties at the Headquarters of the Army in peace and war. In the opinion of the writer the principles which are involved in the changes are not of great importance, and the decision of the War Office to make them would not have created much interest in the Army at large had not they been so much discussed in the press by officers of great experience. This correspondence revealed the fact that a good many people, including the late Q.M.G. to the Forces and his predecessor who had been Q.M.G. in France, were not in accord with the policy of the War Office. On the other hand, the Army Council stuck to its decision, taken after due deliberation, and the Secretary of State for War, after meeting the Service members of the House of Commons, has issued a memorandum explaining exactly what the changes are and his reasons for making them.

Before examining what has been done, it will be well to emphasize the fact that changes seldom imply a straight issue ; there are almost invariably potent arguments for and against any kind of change. But after any decision has been reached it is usually the practice of the critics to recapitulate all the arguments against the change without mentioning those in its favour—the reasons which have turned the balance. This is what has happened on the present occasion. The majority of those who have handled the problems of administration in the past are against the change. Those, on the other hand, who have to handle them in the future appear to be in favour of it. Such, at least to the writer, seems to be the situation in a nutshell. Conditions change and render unworkable that which in the past was looked upon as gospel.

Hitherto the work of the Army in the field has been controlled under three separate non-technical staff officers, who carried out the functions of issuing the commander's orders and of supervising the command and administration of the Army on his behalf. The heads of the various technical departments and services have been grouped under the general direction of these three principal staff officers in as logical a manner as the conflicting requirements permitted. Until we had learnt better as the result of our experiences in the South African War, our staff organization left much to be desired. It is not too much to say that the success of British arms in the Great War was due to the two volumes of "Field Service Regulations" on which that Army was trained and organized. It is also not too much to say that our failures between 1914 and 1918 were due to a disregard of the system that was laid down in F.S.R. Part II, although naturally during the progress of a war in which a hundred divisions were employed instead of a dozen there were bound to be unlooked-for developments in military science.

Before we possessed the volume in question—the real memorial to Haig, Kiggel, Walter Adye and a few other enthusiasts for organization—the staff control of our Army was a marvellous thing. Strong commanders used to develop systems of their own which worked well enough on a small scale. Some of them were inclined—and this was also a characteristic of Lord Kitchener—to use the heads of staff and departments for any purpose other than that for which they were designed. This habit was perhaps not an unnatural one seeing that our military leaders have so often been called upon to organize campaigns without sufficient money or assistance. They have had to manage as best they could with the means at their disposal. Some commanders, too, have had no idea how the machine for which they were responsible was worked and what might be the effect of an order they might issue.

The issue of "Field Service Regulations" produced order and principle, and provided a geared and correlated machine from what before was little more than "a go as you please" system. It needed, of course, a trained staff, and trained commanders to make proper use of it, and these fortunately we had when war broke out in 1914.

Those regulations followed in the main the principles of organization at the War Office laid down by the Esher Committee. That committee succeeded in regrouping duties at the War Office in the same way as they would be carried out in the field. They introduced the system of control under the four military members of the Army

Council which we know to-day. The main principle of the Esher scheme was that affairs in the field should be under three principal staff officers, viz. : the C.G.S., the A.-G. and the Q.M.G. The Q.M.G. both in peace and war was to be the housekeeper of the Army. He was to provide everything which the Army needed—equipment, clothes, food, transport, horses, veterinary services—while the A.-G. was to attend to *personnel* and discipline. But the great housekeeper was not to be a manufacturer. He was to keep the cooperative stores at which the Army dealt, and he was to fill his stores from the factories for the upkeep of which, however, he was not to be responsible. On the analogy of the great stores he was to keep in touch with the needs of his customers and to see that his departmental stores were full of all the things which the Army wanted. The factories, the designing and the inventions were to be entrusted to a fourth chief, the Master-General of the Ordnance.

In those days—indeed, in all wars previous to the Great War—*invention* ceased when war began. Repetition and reproduction at an enhanced rate, of patterns thought out before the commencement of hostilities was all that was required. In the field, therefore, there was no need for a department at the War Office which dealt with manufacture and with inventions. “Repeat orders” did not concern any one in the field. Consequently, at G.H.Q. in the field only three branches of the staff were required, dealing with the work of the General Staff, the A.-G., and the Q.M.G. The question of having a single Chief of the Administrative Staff often came up. But it was always thought that at G.H.Q. there was more work to be done in administration than one man could coordinate successfully, and that two heads were better than one. In all subordinate formations, however, even at the headquarters of a lesser formation in the field, all administration whether in an army, an army corps or a division was under one head, the D.A. and Q.M.G. or the A.A. and Q.M.G. as the case might be, and in smaller organizations a D.A.A. and Q.M.G.

The Great War produced entirely new conditions in which the whole scientific resources of the world were coopted into the war machine. Experiment, and even to some extent manufacture, became necessary in the field, and because there was no definite representative of the M.G.O. at G.H.Q., work which belonged logically to his department and which his department was the proper body to undertake, had to be done elsewhere. The M.G.R.A. and the M.G.R.E. had to be given technical advisers, and heads of new scientific services, such as gas, had to be attached to one of the

branches in the field to which they did not logically belong. The presence at G.H.Q. of a M.G.O. for France would have simplified many matters which had to be dealt with.

Then again a great inconvenience arose at the War Office from the commencement of the war owing to the fact that the branch which dealt with all buildings was under the M.G.O., when the man who dealt with all quarterings was the Q.M.G. In the matter of hutments, which was of such importance between 1914 and 1918, the Q.M.G. was much incommoded by this arrangement, and Sir John Cowans left a strong memorandum behind him on the need for a change of system. In the field the principles laid down by the Esher Committee and given expression to by "Field Service Regulations" had luckily placed the Director of Works in his proper place with the Q.M.G.

The Secretary of State for War has explained the changes which are rendered necessary in view of the mechanization of the Army. The Royal Army Service Corps is charged with the road transport of the Army. The mechanical side of military transport has been its special charge, and it developed and nurtured it with conspicuous success in the war. When the war was over, a small section at the War Office in charge of two officers of the R.A.S.C., set to work to study mechanical transport, to keep in touch with the trade and to investigate types of machines suitable for Army requirements. But whereas during the war until the invention of tanks the R.A.S.C. held the field as the users of mechanical vehicles, as soon as the war was over and the tide of mechanization set in, the problem became one with which the Director of Artillery was far more concerned. To tanks and armoured cars were added every sort of artillery tractor and gun carriage, while the first line equipment of every kind required protected and mechanical vehicles. To have two departments of the War Office dealing with the trade and with inventors was obviously an unbusiness-like arrangement, and the new grouping which is now being adopted merely places the invention branch of the mechanical transport in the same house as the inventions and experiments for all the other mechanical vehicles of the Army. The public has been rather led to believe that the use of mechanical transport was being taken away from the Q.M.G., and this naturally seemed to be absurd. But, as a matter of fact, the use of all transport is always with the commander to whose force it is attached; it is the Q.M.G. who produces it fully organized and allots it.

The really important change, which has more properly raised

the doubts of some of the war-time Q.M.G.'s, is the wisdom of transferring the control of the stores—the large cooperative storehouse to which reference has already been made in this article—from the Q.M.G. to the M.G.O. in exchange for the peace-time and headquarter control of the "Works." It was not until the Esher Committee's recommendations were accepted that the arsenals were brought under the Q.M.G. The Q.M.G. was then charged with all "provision," that is to say, with all the housekeeping of the Army. But the reason given that because he was charged with transportation, he must therefore be charged with all provision, has no real basis either in logic or in common sense. At that time, however, when few people had clear ideas on the working of staff mechanism on a large scale, it was an extremely useful axiom on which to evolve a clear-cut system. To-day when we understand the system we are free to modify it.

The Q.M.G. is charged with the duty of issuing all orders for transportation, and generally with the organization of transportation systems and resources by land or by water. When there is a call for more stores of any kind to be brought up than he has available means of carrying within the time available, he must issue orders of priority. Even when carrying the stores provided under his own orders, he is not always free to make his own decision. He must ascertain from the General Staff, for instance, whether they need ammunition, warm clothing, food or engineering stores to take precedence. Even at the present time he is not responsible for the provision of much that he carries, *e.g.*, he is not called upon to provide men, medical stores and many of the engineer stores, although he is responsible for arranging their carriage, and in the lower formations it is not his representative on the staff but the joint representative of two branches of the Administrative Staff who is responsible. Therefore, it does not affect any organic principle that the Q.M.G. should no longer be responsible for the provision of ordnance, or more accurately, that the head of the technical department which is responsible does not work under his general direction.

The transfer of the work of the Royal Army Ordnance Corps from the Q.M.G. to the M.G.O. may or may not prove to be a wise move, but it upsets no main principle, except that in future the Q.M.G. is not to be responsible for the "provision" of stores. The director who is primarily responsible will take his general orders from the M.G.O. It is not a very big point. It is easily corrected if it is found to create anomalies. The principal reasons for this change is the difficulty of deciding where workshop and factory

repair begins and ends, and the fact that modern repairs now carried out under the Q.M.G. are so extensive that it will save much duplication of work if they are dealt with by the same individual who deals with factories. But an important working reason also is that if the Q.M.G. is to have the "Works" as is so necessary, then the M.G.O. will not have sufficient work, while the Q.M.G. would be somewhat heavily burdened.

Reference has been made to the fact that in all formations below G.H.Q. there is only one head of the Administrative Staff. The departmental head of the administrative services, medical, ordnance, supply, etc., all take their general direction and coordination from him. The fact that the technical head of the department concerned is responsible to another entity at G.H.Q. does not affect the work in the formation in the least. For instance, at the headquarters of an army or corps, as distinct from a G.H.Q., the D.A. and Q.M.G. will represent the Q.M.G., the A.-G. and the M.G.O. instead of, as now, the first two. And the fact that a change in the control of the ordnance department has been made will be unknown outside G.H.Q. so far as any effect on the staff work is concerned. It is obvious, however, that a better designation for the various grades of the Administrative Staff should be found.

When in the future some query from G.H.Q. goes to a lower formation it will go to the same staff officer or to the same departmental officer as hitherto, even though some queries may come from the M.G.O. rather than from the Q.M.G. The belief which has been put forward that the change means any increment in the staff of formations is quite outside the practical understanding of the subject.

It may be said in brief that the new policy includes only one real change. It places the responsibility of providing military stores and equipment on the M.G.O., thus relieving the Q.M.G. of one of his duties. Whether it be good, as the Army Council thinks, or whether it be evil, as so many experienced Q.M.G.'s think, time must show ; but the object of this article is to set forward the reasons for the change without saying whether they are or are not adequate, and to point out that the effect of the changes is far less wide-reaching than many people appear to think. It is of course to be regretted that the universal approval of those with past experience has not greeted the change, but this does not necessarily mean that times and conditions have not demanded the new arrangement.

THE DOWNFALL OF ABD-EL-KRIM

MARSHAL PÉTAIN'S WORK IN MOROCCO

(With Map)

A DESCRIPTION of the measures taken by France in cooperation with Spain to crush the Riff rebellion and to restore the authority of the Sultan in the disaffected parts of northern Morocco is now available in a semi-official account.* The author, who served on Marshal Pétain's staff both in the Great War and in Morocco, is a well-known military writer and one of the officers who has been working upon the French Official History of the Great War. He does not go into details as regards the operations, but he shows how the plan was formed and carried out in spite of all difficulties, political and military, with the result that *la paix française* now extends over a greater part of Morocco than ever before.

The earlier work and achievement of Marshal Lyautey in North Africa are better known, perhaps, than are the difficulties with which he had to contend during the years following the Great War. As Resident-General and Commander-in-Chief he had to face a situation of increasing gravity with forces which were depleted in numbers and reduced in quality as a consequence of the great world struggle. One may say, too, that there had been no suggestion of cooperation between France and Spain ; and whilst Abd-el-Krim was following up his success at Annoual in 1921 by overrunning the Spanish zone as far as Chechaouen and beyond the river Lao, he even protested his friendship for France. Marshal Lyautey knew how unwelcome to both French Government and people would be a call for the large expenditure of blood and treasure ; when, as he had foreseen, it became necessary to stem the Riff tide he made the best of the means at his disposal, and his demands upon Algeria and France were no heavier than would enable him to carry out adequate defensive measures. But in 1924 he was obliged to draw the attention of the French Government to the critical condition of affairs in North

* *La Victoire franco-espagnole dans le Rif*, by Lieut.-Colonel Laure. Paris, Librairie Plon. frs. 15.

Morocco. Abd-el-Krim's power was assuming the proportions of a permanent State ; his forces, augmented by the warriors of the tribes in the territories he had overrun, possessed a considerable modern armament and he had the assistance of many "soldiers of misfortune" who were skilled in modern warfare. His avowed object was to detach the tribes of northern Morocco from the sovereignty of the Sultan and from the authority of the French and Spanish protectorates. "He wished to reign from Ajdir to Agadir."

The spring of 1925 fully justified this view. North of the river Ouergha, Marshal Lyautey had established a *ligne de couverture* running Teroual—Tafrant—Bibane—Mezraoua—Sker—Taounat, but these posts, although they enabled the French to exercise a certain amount of political influence upon the tribesmen in their localities, could not be made strong enough to withstand a rebel offensive. So when Abd-el-Krim took the initiative and overran the Beni-Zeroual, whose chief fled to Fez, he was able to cross the Ouergha river and approach to within twenty-five miles of that city. Farther east the tribesmen advanced until they were barely eight miles from Taza. Road and rail communications between Algeria and the Atlantic seaboard were threatened, and the rebellion seemed likely to have its repercussion away to the south among the restless Berber tribes of the Atlas.

Marshal Lyautey's requests for reinforcements were not only met but anticipated by M. Painlevé, the French Premier, who paid a brief visit to the front in June, 1925. He at once realized—as so many Governments in the past have been forced to realize—that piecemeal reinforcements were useless : it was *grands unités*, not *petits paquets*, which were required. This view was also emphasized by a report from General Daugan, commanding on the North Morocco front. Endorsed by Marshal Lyautey the report reached Paris by air on the 12th of July, and M. Painlevé, recognizing a crisis of the first military importance—for it is hardly too much to say that the colonial prestige of France was now in the balance—called upon Marshal Pétain to assume general direction of the Morocco campaign.

Whilst bearing in mind Marshal Lyautey's proved capacity and long experience of North Africa, it is not difficult to see the reason for this act. Marshal Lyautey, as both Commander-in-Chief and Resident-General, was normally both military and administrative head of affairs and, right down the scale, the commanders of regions and localities combined military and administrative functions. At this juncture, however, no man could effectively discharge the

two rôles, as was clearly understood by Marshal Lyautey himself. His suggestion that another officer should be given command of the military operations had already resulted in the appointment of General Naulin. But the bringing in of Marshal Pétain demonstrated, as perhaps nothing else could have done, that France intended to act with the utmost vigour and determination in spite of the French critics of colonial policy, the enemies of "Imperialism," and of all those factions both at home and abroad with whom the phrase "self-determination" had become an obsession. And the appointment naturally had an excellent and heartening effect on Spain.

Marshal Pétain pleaded his age and his inexperience of colonial warfare, but the Premier overbore him with an expression of complete confidence in the leader of the French Armies victorious in the Great War.

At this time the first results of Franco-Spanish cooperation became manifest, for on the 11th July was signed at Madrid an agreement embodying the joint peace proposals of the two Powers. These conceded to the Riff tribes only such autonomy as was compatible with existing international treaties, and forbade traffic in all arms and munitions; so, although envoys were sent to convey the full text to Abd-el-Krim, no great hope existed that they would find acceptance. Furthermore, France and Spain agreed only to negotiate in concert, neither making a separate peace. The boundary of the French and Spanish zones, provisionally fixed in 1912, was ratified and it was agreed that the military forces of each Power should be allowed to operate in the zone of the other as occasion demanded. Naval cooperation was also provided for, particularly with regard to the projected Spanish landing in the bay of Alhucemas.

French preparations went on apace. The Daugan-Lyautey report had urged that the forces available should be doubled, and the evacuation of the Ruhr was hastened in order to carry this out, the Army of Occupation in Germany sending the equivalent of one division. Marshal Pétain flew from Toulouse to Rabat on the 17th of July to confer with Marshal Lyautey. Their first task was to harmonize the functions of Commander-in-Chief and Resident-General and to complete their staffs. Pétain was then free to examine the military situation at close quarters and to appreciate the magnitude of his task.

Merely to push back the enemy beyond the French zone would do little to break the power of Abd-el-Krim; it was necessary to carry the war into the strongholds of the tribesmen. A French

writer likens the Riff country towards Kifane to the Maritime Alps, and the Djebel which stretches towards Ouezzan to the lower Vosges ; and he compares the state of the hillsides and valleys during the rains to the winter mud of the Somme battlefield during the Great War. Though partly in the French and partly in the Spanish zone neither Power had yet penetrated into these mountains whose inhabitants come of the oldest stock in North Africa, had never been subdued, and constituted a grave menace whenever a leader of sufficient character and ambition emerged, like Abd-el-Krim, to challenge the European occupation.

In a further report to Paris, Pétain said that it was necessary to relieve certain of the troops at once, and he increased his estimate of the numbers required for the converging movements which he designed to carry out. Another essential provision was that of adequate mule transport, the resources of Morocco having been exhausted and the number of animals then arriving from Algeria and France barely sufficing to repair wastage. The Marshal, in fact, was determined that the somewhat rough-and-ready methods of French colonial warfare—proverbially an arduous and perhaps thankless ordeal for the private soldier—should give way to a thoroughly up-to-date organization with all its moral and material advantages. Units must be brought up to strength, and promotions and decorations hitherto so hardly earned must be more generously bestowed ; the comfort and well-being of the troops must be enhanced by developing the postal service and the canteen system. The hospital services, too, required re-organization. European troops must give the native formations no ground for believing that they were called upon to bear the brunt of the fighting. The engineer services required to be supplemented and the lines of communication improved. A squadron of powerful bombing aeroplanes and more native levies from Algeria were asked for particularly.

At this time the concentration of the Moroccan Division between Oudjda and Taza assured the safety of the last-named town.

Local military opinion favoured a main stroke north of Fez aimed at the Beni-Zeroual, but Pétain took a larger view. He hurried to Ceuta and Tetouan to arrange for Spanish cooperation, and here perhaps it was a good thing that he had a Dictator with whom to deal. What General Primo de Rivera decided none could gainsay. The Spaniards had in view their Alhucemas landing which would strike directly at Ajdir, the headquarters of Abd-el-Krim, and this operation won the French commander's warm approval. But he proposed to push towards Chechaouen from Ouezzan—

with Spanish cooperation from Tetouan if it could be secured—while he also advanced from Taza. As the Spaniards were not ready to move effectively in the west Pétain decided that the best course was to concentrate upon Abd-el-Krim's own territory. So he left for Paris at the end of July to see what assistance the French Fleet could afford the Alhucemas landing, whilst Primo de Rivera considered how his Melilla forces could cooperate with the French right, north-east of Taza.

On the 1st of April, 1925, the available troops in Morocco—and be it remembered that the "front" could be reckoned at over one hundred and eighty-five miles—consisted of 39 battalions, 16 squadrons, 20 batteries and 10 air squadrons, with ancillary units. Now there were concentrating no less than 7 complete divisions which, with auxiliaries, formed a powerful and homogeneous modern army specially equipped for the particular type of warfare to which it was committed. The 7 divisions were to be disposed in groups of 2 with 1 division in reserve; the right group in, and to the north and north-west of, Taza; the centre group behind the Ouergha river, south of Tafrant; and the left group at and south of Ouezzan. East of Taza a special force of cavalry was to act.

The requirements of Pétain, though constituting a serious drain upon France's military and financial resources, had been readily met by the Premier; but other members of the Cabinet were uneasy at the turn which events had taken. The Commander-in-Chief was, therefore, bidden to a special conference where he won the approval of the Finance Minister and the Minister for Foreign Affairs, MM. Caillaux and Briand. Then, by special request, the Marshal prepared a *communiqué* for the press. Published on the 10th of August the statement proclaimed that France had been attacked by the most powerful antagonist she had yet encountered in her colonial wars, paid a graceful tribute to Marshal Lyautey, and said that sufficient French forces were being assembled in Morocco to re-establish the power of France and to guarantee her against any such menace in the future. From the *communiqué*, and from other figures furnished to the Premier, it would appear that the tribes of the Riff and the Djebel with their allies and partisans were reckoned to consist of something like 140,000 fighting men.

As the rains were to be expected about the middle of October Pétain fixed the 10th of September as the latest date for the commencement of operations. His plan, as now outlined, for the subjugation of Abd-el-Krim may be summarized as follows:

1. Before the rains began, to advance along the whole front and

to occupy, particularly, Ajdir and the upper valleys of the rivers Msoun and Kert to serve as bases for an advance into the Riff.

2. During the winter to bring influence to bear upon the tribes in the territories around these bases and so to secure, if possible, their submission.

3. In the spring of 1926 to adopt vigorous military and political action, the objective being the centre of the Riff country, between Targuist and Ajdir.

With a complete staff Marshal Pétain left Paris on the 18th of August in order to assume active direction of operations. On his journey he read two reports, which had just been received in Paris, of successful minor operations, one north-west of Ouezzan and the other north-west of Taza. In the latter region an important tribe had capitulated and communications with Algeria were thus rendered still more secure.

It is interesting to find that General Naulin and Marshal Lyautey were not in agreement with Pétain's plan. They seem to have regarded his idea of striking direct at the Riff country as too venturesome, and, from their experience, they dreaded the consequence of a failure and an enforced retreat. In their minds the short period of favourable weather still remaining could best be utilized by launching two powerful blows—from Tafrant and Teroual on the west and from Taounat on the east—at the Beni-Zeroual country and adjacent tribes. Each force was calculated at 2 divisions, with auxiliary troops, and preliminary movement orders were given before the new Commander-in-Chief arrived.

The latter met General Primo de Rivera at Algeciras, Marshal Lyautey at Casablanca, and General Naulin at Fez, where an important military conference was held. Pétain did not forbid the movement against the Beni-Zeroual, for he saw that, if they could be forced to submit, a wedge would be driven between the Djebel and the Riff. But he laid down certain limitations, so that he would still be strong enough to operate north and east of Taza and to carry out the larger plan of cooperation with the Spanish forces, with whose movements he was kept informed by aeroplane.

Abd-el-Krim was still active. He had induced the tribes of the Djebel to attack the Spanish positions south of Tetouan (Kudia Tahar) and the French posts at Issoual, south-east of Ouezzan. Confident that the attacks could be held without special reinforcement, Pétain went on with his preparations in the Taza region, although General Naulin, in view of this enemy activity, was constrained to ask for more troops in the west. On this part of the

front, however, the tribesmen were everywhere repulsed and the French and Spanish forces soon took the initiative elsewhere.

At the beginning of September a substantial advance was reported around Tafrant and in the Taounat region, the French troops engaged meeting with a feeble resistance and suffering little loss. On the 6th of September the Spanish landing near Alhucemas Bay was made. It proved an arduous and difficult operation, and a feint landing at the mouth of the river Lao appeared to have little effect. However, by nightfall, the French squadron having rendered great assistance in the bombardment, no less than 8,000 men and 3 mountain batteries were ashore at Cebadilla. More troops were speedily disembarked and considerable progress was made towards Ajdir during the following days despite the stout resistance of the Riffs.

In the next stage Pétain sought to push out his right in conjunction with Spanish forces advancing from the east. Whilst the XIX Corps under General Boichut enlarged the French gains around Kifane with its right on Ain Zohra, a mobile column commanded by Colonel Jonchay was to operate in the direction of Syah, moving thence on Tiziouzli and Si. Ali Bou Rokba. It was first necessary to secure Spanish cooperation with Jonchay's column, and Colonel Laure was sent, therefore, to Tetouan to arrange for a Spanish advance—at least 3 or 4 battalions strong—to reach Azib de Midar in touch with the French right at Si. Ali Bou Rokba.

Bibane, east of Tafrant, was occupied about the middle of September and Pétain now specified a limited objective north of Tafrant ; but he prohibited the development of the advance eastward from Bibane. The Spaniards still made progress towards Ajdir although they had to resist many resolute counter-attacks, and the rough sea made it difficult to supply the troops. Meanwhile, the Spanish Dictator had demonstrated his good faith by refusing to consider a separate peace and informing Abd-el-Krim's envoy that complete submission to the two Powers were the only terms on which hostilities could cease.

General Primo de Rivera did not judge himself strong enough to do all that Pétain hoped for on the eastern flank. In the west, where he was obliged to stand on the defensive, his forces could not be reduced, and he naturally regarded as of paramount importance the advance on Ajdir where Abd-el-Krim was reported to be gathering his main strength. He also hoped to act on the Melilla front, where an advance along the coast towards Annoual would have the advantage of the assistance of local partisans and, he hoped, of the

guns of the French squadron. Eventually de Rivera promised 800 cavalry to cover Jonchay's right.

On the 25th of September M. Painlevé—who knew that the French public was still inclined to expect a speedy end to hostilities—telegraphed to Pétain for his view of the repeated peace overtures that came from Abd-el-Krim. The Marshal pointed out that enough had already been accomplished to shake the belief of the tribes in Abd-el-Krim, who obviously sought to temporize in the hope that when the French Chamber re-assembled “peace at any price” opinion might be strong enough to bring pressure to bear upon the Government. He counselled an uncompromising attitude and no *pourparlers* of any kind.

At this juncture Marshal Lyautey tendered his resignation. The purely administrative position which was all that remained to him could hardly be congenial to a soldier of his eminence, so it is no matter for surprise that he now sought the retirement which he had so well earned. His services to France and to North Africa can be in no danger of oblivion.

Unfortunately the rains set in early—before the end of September—and movement became difficult. Nevertheless, on the last day of the month the XIX Corps advanced its positions along the Ouizert river. Pétain paid a personal visit to this region to urge forward the work on communications and to prepare for the next move which, in spite of the weather, was to see Jonchay in motion and to throw forward the whole of the French right. Then, at a conference at Fez on the 4th of October the Marshal laid down to his commanders the policy for the winter months. Troops must be prepared to forego relief and the positions held must be organized to the best advantage, always with an eye to the resumption of operations in the spring. Political action was all important. Many tribes which had suffered greatly from aerial bombardment and were faced with winter hardship might be expected to submit if encouraged to do so.

Next day came the news that Ajdir had fallen on the 2nd of October. After heavy fighting Abd-el-Krim had retreated leaving many guns and a great accumulation of ammunition in the hands of the Spaniards. By the 7th of October the French advance up the Chaouia and Ouizert rivers had reached the region Nador-Tiziouzli, but the bad weather made it difficult to supply the troops. Special transport columns of mules and camels served Jonchay, who had moved out to Sk. Es Sebt Aïn Aïmar, where he was in touch with the Spanish cavalry. It was hoped to establish a line of posts along the river Kert although the weather was already so bad that a detach-

ment which had reached Rokba was withdrawn to Bou Inoud owing to difficulties of supply ; but the Spaniards were not yet in a position to give much assistance here. So, as the Melilla forces had failed to make much headway towards Afraou, the operations of the French right wing came to an end, the XIX Corps occupying Aïn Zohra in liaison with the Spaniards at Syah. The losses of the advanced troops in falling back to the Zerakna line are the only ones of moment in the campaign.

For the winter then the Spanish, now holding Ajdir, were active politically in the region south of Afraou, and at Syah they were in touch with the French at Aïmar. Thence the position ran Aïn Zohra — Tiziouzli — Nador — Bab Taza — Sker — Astar — Djebel Messaoud — Tafrant — Ouezzan.

In a private letter to the Premier, dated the 20th of October, Pétain enlarged upon the difficulties of campaigning in the rains. Exceptionally violent storms had caused great damage between Taza and Kifane ; bridges had broken down and torrents of mud had wrought havoc to the roads. He thought that the public should be informed of the hardships to which the troops were exposed in holding the advanced posts on the threshold of the Riff country. An official report despatched soon afterwards outlined the projected Franco-Spanish operations for 1926 and again pointed out the necessity for a firm pursuance of the Franco-Spanish policy as Abd-el-Krim still hoped for dissensions between the two Powers.

At this time the question arose as to whether the usual regional administration should be restored in North Morocco. The system had been overset by military necessity, but Pétain now considered a reorganization which would leave commanders of important formations commanders also of the districts in which they operated. At a conference the objection was raised that the senior officers commanding divisions had only come to Morocco for the duration of the campaign and had not, therefore, the local knowledge and experience to fit them for political and administrative duties. The Marshal eventually commended this delicate matter to the attention of M. Steeg, the new Resident-General.

The last forward movements of troops took place towards the end of October when the Djebel Messaoud and Ouled Ali districts were cleared. North of the Ouergha, towards Bibane, the weather prevented any permanent occupation of territory. Pétain and his staff officers now made a personal inspection of the front, and, although the conditions were bad, the Marshal was able to satisfy himself that, in spite of the cold and the mud and the difficulties

of supply, the troops were in good heart and would be able to hold the forward positions throughout the winter. After an important conference with M. Steeg concerning the measures to be taken to win over the tribes during the winter, Pétain left for France.

He arrived in Paris on the 8th of November. As was his custom he refused to be interviewed, but, we are told, he summed up the situation in a short statement : "*Le Maroc est désormais tranquille. Abd-el-Krim n'est plus à craindre. Ma tâche militaire est accomplie. Je passe la main à la politique.*" These cryptic sentences could easily be misunderstood by those who were still agitating for a premature peace, and were only too eager to put their own construction upon them. Marshal Pétain obviously meant that the policy initiated by him had only to be followed to its logical conclusion and that his presence in Morocco would no longer be required. As a matter of fact he never did return, and General Boichut succeeded to the military command. He certainly did not mean that the time had come to treat with the enemy ; but the " Riff Committee " now became very active, and Messrs. Gordon-Canning and Gardiner, self-constituted peace envoys of Abd-el-Krim, asked in the Press what measure of self-government the French were prepared to allow to the Riff tribes. For the moment this agitation received no attention from the French Cabinet.

The restoration of French and Spanish prestige was already beginning to have its effect. Before the end of the year the friendly caïd of Marnissa had been reinstated and the districts of Mosbah and Gheddo, as far as Nador, detached from the influence of Abd-el-Krim. The Spaniards had made headway amongst the tribes of the Riff country both to the east and on the Mediterranean seaboard, for it was beginning to be whispered amid the mountains that Abd-el-Krim's star had set. Even greater progress was made in the peaceful penetration of the Djebel country, the chief tribes between Tangier and Ceuta and west and south of Tetouan asking for an amnesty.

On the 30th of December, M. Briand, who had succeeded M. Painlevé, made a statement in the Chamber which clearly defined the position of France and Spain. He pointed out that the agreement with Spain was to prosecute the Riff war to a victorious conclusion ; any discussion with the " Riff Committee " would be exploited for the benefit of Abd-el-Krim, increasing his prestige and enabling him to prolong hostilities. The situation was further explained in an inspired article in the *Revue des Deux Mondes* of the 1st of January, 1926.

At the request of King Alfonso Marshal Pétain visited Spain in February, when the plans for the spring campaign were finally settled. The Spaniards would attack in three directions : from Ajdir southward between the Ghis and the Nkour ; westward along the coast from Afraou ; and south-westward from Azib de Midar on Sk. Et Tleta D'Azlef. The French would advance from about Nador east of the Nkour ; between the Nkour and the Ghis ; and north-westward in the Targuist direction. Each Power was employing about 25,000 men, with ample artillery, tanks and aeroplanes.

It seems that the submission of so many tribes and the growing tranquillity of North Morocco caused the authorities on the spot to wonder if France's best interests might not be served by avoiding further military action and seeking, by peaceful overtures, to establish order up to the limits of the French zone. And the voice of the " Riff Committee " was heard again in the foreign Press and certain French journals took up the plea for peace. At the request of the Government Marshal Pétain prepared a statement which set forth France's obligations as the principal guarantor of the authority of the Sultan, who had asked that Morocco should be rid of the rebel Abd-el-Krim. It also pointed out that the agreement with Spain must be honoured and military operations continued till a durable peace was obtained. Peace proposals now came direct from Abd-el-Krim, and Pétain sent a note to M. Philippe Berthelot, French Ambassador at Madrid, explaining once again his policy and urging that a special ratification of the Franco-Spanish military agreement was advisable. This the Marshal did with the full approval of M. Briand and M. Painlevé, now Minister of War.

But Abd-el-Krim's emissaries were still active, and proposals which mentioned the surrender of the French and Spanish prisoners could hardly be ignored. Hostilities were temporarily suspended and much time was given to formulating the joint proposals of France and Spain. Negotiations dragged on. Abd-el-Krim asked for recognition of the " Riff Government " : France and Spain could not demand less than an immediate surrender of prisoners ; the unimpeded allied occupation of the Kert line ; the banishment of Abd-el-Krim ; and the submission and disarmament of the tribes still in the field. Agreement was obviously impossible, and one can only marvel at the patience of the French Government—it was well known that the rebels were infringing the terms of the armistice—which permitted the *pourparlers* to continue until the 8th of May. Then the Franco-Spanish forces were again put in motion.

Of the Taza Group one division advanced from Azrou towards the Kert in touch with a Spanish column from Syah, whilst another from Azib de Midar had Tleta D'Azlef for its objective. These movements turned the Riff positions in the mountains lying south-east of the Kert, which had been strengthened while peace negotiations were proceeding, and soon the line of the Kert was secured. In the Ajdir sector the Spaniards, after heavy fighting, advanced as far as the mouth of the Ghis. The forces based on Fez penetrated the western area of the Beni-Zeroual country almost as far as the limit of the French zone.

From the 15th to the 17th of May the converging movements upon the Riff made great headway. The French reached Taourirt, where they joined hands with the Spaniards. The Ajdir forces advanced through the Beni-Ouriaghel country between the Ghis and Nkour, occupying Temassint whence Abd-el-Krim fled. A Spanish column from the east marched through the coastlands between Sidi Dris and Annoual, now reoccupied after an interval of five years. The Taza Group drove deep into the heart of the Riff country between the Nkour and the upper Ouergha. Now the end was soon to come. On the 24th of May Targuist was occupied and Dj. Hammam. Abd-el-Krim made a last attempt at peace parley and then gave himself up to the French commander at Tizemmourene, after having first liberated the French and Spanish prisoners. The concluding operations were mostly in the nature of receiving the submission, and in superintending the disarming, of the tribesmen.

Such a tame ending to what had been a serious crisis only a year before is the best justification of Marshal Pétain's policy and methods. A striking feature of the operations is the short casualty list, due to the fact that strong forces can overawe where weak detachments must fight for their lives. Morocco is still only in course of pacification, but in the manner of crushing of the Riff rebellion in 1925-1926, France may find valuable guidance for the handling of any similar crisis in the future.

[illegible]

Digitized by Google

LOST ARMIES

DESTRUCTION BY POLITICAL ACTION

BY COLONEL SIR HAROLD PERCIVAL, K.C.M.G., C.B.E., D.S.O.

As defined in the opening chapters of our own Field Service Regulations, the responsibility for the adoption, modification or revision of a plan of campaign, or, in other words, for the selection of the nature and scale of any operations of war, rests with the Government. From this generally accepted theory it follows that political parties or bodies, or, indeed, individual wire pullers, who can directly or indirectly influence the Government can also exert an influence on the organization of the armed forces and the conduct of military operations.

Nevertheless the consequence of the exercise of such power in the past is a factor which, if not exactly ignored by historians, has frequently not carried sufficient weight in the appreciation of cause and effect. This is not unnatural, for the narrative of the execution of operations is bound to be more interesting to the average man—whether writer or reader—than the account of political motives, however intriguing, which actuated those responsible for planning the operations. But as a result from such an incomplete and one-sided presentation a false impression is given of past events. This is accepted and handed down as history, and from it are drawn totally incorrect inferences. In no walk of life is this more dangerous than in that of the soldier, in which action is to a great extent based on the lessons of the past.

A striking example of this is afforded by the generally accepted picture of the oft-described campaign of Ulm, of 1805, when, after a few minor engagements, Napoleon, with 200,000 men, surrounded and compelled the surrender of 70,000 Austrians. Owing to ignorance of the whole truth, especially in regard to the political factor, this campaign has for years been held up as a classic example of what can be achieved in war when one commander succeeds in misleading his opponent as to his intentions, and on this ground has formed the text of many writings and much lecturing.

Unfortunately it illustrates nothing of the sort. In one way no harm has been done by the error, for the fact that it is a great advantage to mislead an enemy remains true, whether it was proved by the overwhelming success of the French in 1805 or not. But in another way harm has been done, because this campaign is not quoted as an outstanding example—which it in fact is—of the danger of interference in the conduct of a war by politicians, especially when they act from motives remote from a desire to win.

That Napoleon was able to achieve the result he did without fighting a serious battle has been attributed by his staff and other French eye-witnesses to the fact that he deceived the Austrians as to the movements of his main force by sending Murat's cavalry, supported by Lannes' Corps, into the Black Forest to demonstrate in the direction of their front whilst his main body actually marched round their right.

To show that this is the accepted view it will suffice to quote one official French statement. So late as the 5th of October, 1805, when the French were already on the right flank of the Austrians, Berthier, Napoleon's Chief of Staff, wrote to one of the Corps commanders (Soult) that the enemy was only just beginning to become aware of this turning movement.

When, however, we refer to evidence on the other side we find that this was not the case. The Austrians were all along extraordinarily well informed about their opponent's actions. Not only did their cavalry patrols send timely information that the enemy was not in force in the Forest, but accurate intelligence daily reached Austrian headquarters from Stuttgart and other areas through which the French were actually marching. Nor is this surprising, seeing that the populace was not in sympathy with the invaders. The reports sent daily to Vienna—still available in the archives of the War Ministry—prove conclusively that headquarters knew of the advance on its right flank almost as soon as it commenced.

Beyond this there is the following evidence that there was no demonstration by Murat's cavalry through the Black Forest. For the purposes of a demonstration, if that had been intended, it would have been necessary for Murat and Lannes to act with vigour. But, in a letter to Murat, dated the 21st of September, Napoleon sent instructions that neither he nor Lannes were to attempt any serious operations in the Forest. That a demonstration was not contemplated by Napoleon is also made clear from his order of the 20th of September, according to which Lannes' Corps was to march to Stuttgart. We know that the Emperor's first intention was not to

depend to any extent on the bridge at Strassbourg for the crossing of the Rhine, but that, owing to the delay in the construction of other bridges, this plan had to be altered, and that information subsequently reached him that the Black Forest was occupied by considerable hostile forces. It seems, therefore, a justifiable assumption that the orders to Lannes to stand fast before the bridge at Strassbourg and those to Murat to feel his way cautiously through the entrances of the Forest had to do with the security of that bridge and the French right flank rather than with any effort to mislead the enemy as to the line of advance. This, at any rate, is the view expressed by Major-General Krauss, of the Austrian Army, after a careful scrutiny of the archives of the Austrian War Office, in his 1805 *Der Feldzug von Ulm* (1911).

What Napoleon himself thought on the subject a week later we also know. On the 27th of September he wrote to Talleyrand that his only anxiety was lest the Austrians be alarmed and remove their forces from the Black Forest. ("*Les Autrichiens sont sur les débouchés de la Forêt-Noire. Dieu veuille qu'ils y restent. Ma seule crainte est que nous leur fassions trop peur.*")

Why, then, should Napoleon's staff have been under the impression that the Austrians had been misled by Murat? The answer probably is that the staff was aware of the Emperor's intention, expressed in his orders of the 17th of September, to send the V Corps through the Black Forest, and also of the fact that Murat had been ordered to take post during the first advance of the Army from the Rhine on the right flank. When the staff further discovered that the Austrians had taken up a position as if against an attack from the direction of the Forest, and that they still maintained that position when the French marched round their right the conclusion that they had been deceived was not unnatural. Nevertheless, it was incorrect. As has been stated, it was not due to ignorance that the Austrians failed to conform to Napoleon's movements. It was due to the effect of political intrigues in Vienna upon the command of their troops in the field.

To substantiate this contention, it is only necessary to recapitulate the events which led to the Austrian Army being trapped at Ulm. At the commencement of the nineteenth century the financial condition of Austria, already serious, was growing desperate. The revenue did not suffice to cover half the expenditure, and the administration had shown itself quite incapable of coping with the situation. No real attempt to make both ends meet was made by the Ministers. No help was given them by the departmental

officials, who had gained their posts by social influence and were only concerned to entrench their positions and obtain preferment. For a subordinate to show zeal and initiative in his work meant the exposure of colleagues and superiors devoid of both. Such qualities were therefore suppressed, and in all the Government offices work was practically at a standstill. For instance, according to the Treasury records, at the close of the eighteenth century accounts were already six years in arrears. As the activities of other departments were on a par with this, the financial situation of the country may be imagined.

So long as money could be raised by loans Ministers were content to borrow. But in the end, when that means failed and money had to be obtained somehow and expenses curtailed, the Government fell back on the time-honoured device of reducing the Army and selling its horses and equipment. But this was not done without opposition on the part of the Army leaders.

The Archduke Charles, who was at the head of the War Ministry, President of the War Council, and Commander-in-Chief of the Army, protested strenuously against all proposals for cutting down the military forces and countered by suggesting a reformation of the civil departments, by means of the removal of all the redundant and useless officials of the Civil Service and compelling those left to work. The only result of this was a bitter feud between the War Minister and his colleagues.

In the middle of this confusion (early in 1804) came the offer made by Russia to provide 180,000 troops if Austria would join in a war against France. When asked by the Emperor Francis for his views the War Minister at once pointed out that in the state to which the country had been reduced it was useless even to think of hostilities.

He followed this opinion up by several long reports in which he showed : (i) that there were no funds wherewith to make war ; (ii) that there were not sufficient men to fill even the peace establishments of the Army ; (iii) that there was no equipment left ; (iv) that to mobilize the Army would take six months, even if money, men and equipment were obtainable ; (v) that, apart from these difficulties, any support given by Russia was unlikely to be sufficient to ensure the victory of the Allies ; and (vi) that the French were in a position to strike at the Austrians before the Russians could cooperate, whatever plan of campaign was adopted. The Archduke's advice—which turned out to be correct—should have been accepted, as that of the constituted Military Authority. But the

report reflected adversely on the conduct of the Government, and the other Ministers of State determined to get rid of him.

This, however, was not easy, for the Archduke was Austria's most efficient general, was the Emperor's brother and was extremely popular. The first step, of course, was to produce a counter opinion from some other officer of standing. Since no general still serving was likely to produce one, the Minister of Foreign Affairs, Count Cobentzl, sought the help of General Mack, then living in retirement in Bohemia. Mack at this time had a considerable military reputation in England and Russia, for as a staff officer he had in the past done well. But he had afterwards mismanaged the campaign of 1799 in Italy, where he had been in command of a Neapolitan Army. Since then he had not been re-employed. Of the condition of the Austrian Army in 1804 he knew little, but he was good with his pen, and on being approached promptly wrote a treatise refuting practically every statement and argument put forward by the Archduke. This document was submitted by Cobentzl to the Emperor, who was induced to grant the writer an audience. It did not take Mack—as glib a talker as he was a writer—long to convince the Emperor that the Archduke was wrong and that it would pay to make war with France.

The Archduke, who up to this point had been unaware of this intrigue, was as War Minister now informed of what had taken place. Naturally indignant, he told the Emperor plainly that he would have none of Mack, and censured the latter for having presented himself and his report to the Emperor without his knowledge. With the help of the other Cabinet Ministers, however, the junior officer held his ground; and from that moment there were two recognized military parties at Court. One, led by the Archduke Charles, was supported by the Archdukes John and Ferdinand and all the prominent military experts. It stood for peace. The other, led by Mack and the Minister for Foreign Affairs, and backed by the most influential members of the Cabinet, by the Empress and the greater part of the Court, stood for war.

The war party was favoured by the Emperor Francis, who was jealous of his brothers—the Archdukes Charles and John—because of their popularity with the Viennese, and in the end that prevailed. It was decided to accept Russia's offer and to go to war with France.

The following were the arguments put forward by Mack in discussions with the Emperor and before the War Council. He argued that not only were six months not required for mobilization,

but that it was even desirable to march into Bavaria forthwith with the Army as it stood, at peace strength and without war equipment. He considered that this policy might influence Bavaria to join in against France, whereas if the Austrians delayed, the French would in the meanwhile not only occupy Bavaria and compel the latter to join themselves, but would also menace the Tyrol and the communications with the Austrian forces in Italy.

When Archduke Ferdinand, who was selected to command the Austrian Army in Bavaria, pointed out that it would be risky to move into that country with a weak force, as Napoleon might attack it with overwhelming numbers before the Russians could come up in support,—this is what actually happened eventually—Mack replied that the latter were certain to arrive in time and that the Austrians would in any case be in a very strong position at Ulm, where they would “command the valley of the Danube.” At the worst the force there could always be supported by Austrian troops of the reserve to be assembled in the Tyrol or could retire on the latter.

When he was informed that he had overestimated the strength of the Army, as he had not taken into account the large numbers absent from the colours—this overestimate amounted to 120,000 men—his answer was that the French also had absentees, and as their numbers increased so would also those of the Austrians; and that the superior quality of the cavalry and staff of the latter would in any case equalize matters.

The Archduke Charles urged that the available transport was inadequate to meet the requirements of a campaign. To this Mack's contention was that there was too much transport already with the Army. The French had been victorious in so many campaigns precisely because they had not been handicapped by having to employ large trains, but had lived on the country. They were more mobile than the allies. He advocated the reduction of the existing transport by one-half and the adoption of the French supply system.

The Archduke argued that whilst Napoleon was in sole command of the French Army, the Austrians would be at a disadvantage, owing to the necessity for consulting the Russians at every step. Mack's view was that Napoleon's situation was very insecure, France being on the eve of a revolution, and that his Army was thoroughly demoralized, half of it having already deserted.

(The writer has not come across any arguments put forward by Mack regarding the financial situation. No doubt he would

draw attention to the fact that England was prepared to pay £1,250,000 annually in cash for every 100,000 men.)

In this discussion Mack was not upheld by any of the military experts, and on several occasions it looked as if the Emperor would decide against him. But he had one weapon in his armoury which the Archduke lacked—flattery—and this he did not neglect to use. From his correspondence with the Emperor it would be inferred that his plans and arguments were based on the wise suggestions of the latter, whereas the fact was that the Emperor had little or no knowledge of military matters. It was by such means that he obtained acceptance of his scheme and the appointment of himself as Quartermaster-General, or, as we should now say, Chief of the General Staff of the Army.

The next step was to remove the Archduke Charles from the presidency of the Imperial War Council. Eventually, the new Chief of Staff succeeded in doing this under the pretext that it was essential for the Emperor to be in supreme control of the military administration, and that as the Archduke would be fully occupied in directing the operations of the Austrian Army in Italy it was desirable that he should, for the time being, be relieved of the duties of President of the War Council. But, as he still lacked the support of the military leaders, he endeavoured to gain adherents to his scheme by recommending certain individuals for accelerated promotion. The recommendations to the rank of Field-Marshal submitted by him on the 21st of August, 1805, were for influential persons only, such as princes connected with the Imperial House, the newly-appointed President of the War Council, the Adjutant-General of the Emperor and finally also himself, although he was only sixty-third on the list of seniority. When the Emperor refused to make these promotions the new Quartermaster-General found himself in a difficult position, for he was not senior enough to command the Army which was to march into Bavaria, and this, of course, was his object. So he arranged matters in such a way that the command of both the Austrian and the Russian Armies should be held nominally by the Emperor of Austria. As Chief of the Staff to the Emperor he would then be in a position to issue orders to these Armies and so actually to exercise the functions of command.

The Austrian forces were divided into three Armies, one to operate in Italy, the other in Bavaria, and the third in the Tyrol, where it could cooperate with either or both the others and so form a reserve. The Archduke Charles was to command that in Italy and the Archduke Ferdinand, who was then twenty-four years old, that

in Bavaria. As has been said, Mack, as Chief of the Staff, would then be able to exercise control over both in the name of the Emperor, but he was not interested to any extent in the Army in Italy. So far as he was concerned, that force was useful because its situation compelled the Archduke Charles to be absent from Court, and so gave him greater liberty in the War Council and with the Emperor. In regard to the Army of Bavaria, he hoped that, owing to the youth of Ferdinand, he would be able to exercise a control amounting to actual command.

Having thus succeeded in obtaining a free hand, he issued orders for the move of Ferdinand's Army into Bavaria on the 8th of September, 1805. He, as Chief of the Staff, should have remained at Vienna to coordinate the movements of all the Armies. Actually he accompanied the troops into Bavaria, and started to issue orders in the name of the Sovereign. Whereas Ferdinand, the commander who should have accompanied this force to Bavaria, was on Mack's advice ordered by the Emperor to remain in Vienna until it would be ready for him. Mack then proceeded to put into execution his own plan of operation, with results very different from those which he had anticipated. As arranged, the Austrians invaded Bavaria at peace strength and hurried to the river Iller in order to overawe the Bavarians into joining with them, but, so far from being overawed, the Bavarians withdrew their forces, some 18,000 strong, to join Napoleon. This was the first miscalculation.

Then, when the troops to complete the Army to war strength began to arrive in Bavaria, they were split up in many detachments all over the country, since no one knew where their regiments were located. Every village, every town was full of soldiers inquiring the whereabouts of their units which they never appeared to be able to find.

Nor was the situation improved by the change introduced in the method of maintenance and the consequent reduction of Army transport. Under the old system the Army was supposed to march with fourteen days' supplies (four on the man, ten in transport), and arrangements were made to replenish this amount from magazines. Now the troops were suddenly told to give up their transport and to requisition requirements from local resources. Regiments already below half their strength were now still further reduced by the necessity for furnishing requisitioning parties day by day. In the absence of detailed instructions, giving statistical data and other necessary information, the work of these parties could not be carried out fast enough. They could not keep pace with the troops and

were left behind. The same thing happened to fresh parties detailed for the same work, so that the units were soon spread all over the country-side in search of food. In spite of this the troops were not fed. The records show that only one-third of what was necessary was actually requisitioned in a more or less regular fashion ; and of this it is doubtful whether more than one-half reached the troops. The soldiers, therefore, were forced either to pillage or to starve.

Mack had fallen into the common error of regarding the French supply system as an exceedingly simple one. He imagined that the troops requisitioned supplies for themselves as needed from local authorities, farmers and others, without troubling over-much about organizing a special service to do this. For this erroneous view there is some excuse as it is one which was, and is still, held by many students of Napoleonic warfare. The frequent references by Napoleon and his Chief of Staff to the fact that in 1805 the French Army moved without magazines and lived on the country has led to the assumption that it marched without mobile supply reserves and requisitioned in the same way as the Austrian Army. This was not the case. In this campaign minutely detailed instructions were drawn up by Napoleon himself and most of his Marshals to ensure that after the Rhine was crossed eight days' supplies should accompany the troops, and that this amount should be maintained. Of these eight days' stock, four were to be kept in reserve as " battle rations " for consumption when the concentration of the Army rendered requisitioning impossible.

Napoleon himself had made up his mind that not less than sixteen days' supplies should be carried with the Army. And it was only when he discovered, at Strassbourg, that the transport contractors had failed to produce sufficient vehicles and that the military administration had neglected to provide the supplies that he made a virtue of necessity and arranged to cross the Rhine with the less amount. But in his instructions to his Director of Supplies he expressly pointed out that the provision made was insufficient. Incidentally, in doing this, he made a curious blunder. He allotted requisitioning areas to most of the corps by directing each to draw upon the country lying to the left of the roads by which it was marching, as far as the road used by the next corps on its left. This arrangement was obviously unsound, as it compelled the troops to leave the resources which happened to lie on the right side of the road in the villages and towns through which they passed to other formations marching at a distance from these places. Neither the

local authorities nor the troops themselves could be expected to comply with such an order. It had the advantage, however, of compelling corps to keep touch with one another. In any case, it will be seen that considerable trouble was taken to organize a supply service. Its administration occupied a Director of Supplies, one hundred and sixty-eight officials, and one hundred and eighty-two other ranks at Napoleon's headquarters, and each corps and smaller formation was similarly allotted an adequate staff under the General Staff.

Mack did the exact opposite. He issued practically no instructions and provided little or no transport for these services, with the result described. Whilst the Austrians were being hurried forward towards the Iller without being given time to organize and equip, their commander remained in Vienna impatiently awaiting permission to join his Army. On the 11th of September, 1805, that is fourteen days before the French began to cross the Rhine, he asked permission to order it to halt forthwith and to concentrate it on the river Lech to await the support of the Russians. This request was ignored by the Emperor. At last, on the 19th, he succeeded in reaching Munich. Here he found his headquarters totally disorganized. While Mack, who was reconnoitring in the direction of Ulm, had taken a portion of the headquarters with him, the administrative section had not yet joined. The troops themselves, scattered all over Bavaria, were doing their best to procure subsistence—as it turned out, unsuccessfully.

Realizing the hopelessness of the situation, Ferdinand at once recalled Mack. Mack ignored the order. Ferdinand then did the only thing possible in the circumstances, he ordered the advance towards the west to be stopped and the corps and other formations to organize themselves. On hearing of this Mack wrote demanding that the order should be cancelled. This Ferdinand at first refused to do. But a few days later, when the Emperor arrived with his Ministers, he was commanded to comply. Mack was present at the interview at which this happened, and, to prevent a recurrence of such interference on Ferdinand's part, obtained the sanction of the Emperor to the removal of the Archduke's Chief of the Staff (Major-General Mayer) from his appointment. So soon as the Emperor left for Vienna, Mack again set forth to reconnoitre the Swiss frontier and the valley of the Iller. This was on the 25th of September, the day on which the French began to cross the Rhine.

During the next week Napoleon's intention to move against the Austrian right became more and more clear. On the 27th, Mack

learned of the crossing of the French at Speyer and Strassbourg, and on the next day Ferdinand reported to the Emperor that he feared Napoleon would attack his right flank. Apparently oblivious of the threatened developments Mack calmly continued his reconnaissance of the Swiss frontier. On the 30th of September he returned for a brief visit to headquarters, but was too tired to report to Ferdinand, and left next morning, without discussing the situation, on yet another reconnaissance, this time of the valley of the Danube.

By this time Ferdinand had complete information of all movements of the French up to date and sent an urgent message to Mack, drawing attention to what appeared as the dangerous position of the Army. As the officer charged with the message was unable to find Mack, and the situation had by then become most serious, Ferdinand decided to disregard the Emperor's instructions and to order a concentration of the Austrian Army towards Ulm. This could only be carried out partially since there was no means of feeding the whole force when concentrated. But whilst Ferdinand was ordering a concentration towards Ulm, Mack from elsewhere was issuing orders in the name of the Emperor for the same troops to move in another direction, with a result that can be imagined. It was not until the 4th of October, when the French were already approaching the Danube in the rear of the Austrian Army, that Ferdinand and Mack met, and then by chance on the road from Ulm to Munich. The former seized the opportunity to urge, as he had often done before, a retirement to the rivers Lech and Inn. Mack declined to listen, and the two once more separated, the Archduke proceeding to Mindelheim, near Munich, and Mack to Ulm.

Having by now completed his reconnaissance Mack turned his mind to framing plans for defeating the enemy. He had already issued orders for fortifying the main towns along the Iller and Danube, and as he held the bridges over these rivers he thought that he was in an impregnable position. "Ulm," he said, "commanded the valley of the Danube, his Army held Ulm and therefore he was bound to defeat the enemy." So, on the 6th of October, he wrote a long letter to the Emperor to congratulate him on the great victory the Austrians were about to gain over the French, a victory entirely due to the "wise and great decisions emanating from His Majesty." He deeply regrets the fact that His Majesty is not present with his Army on so auspicious an occasion. Next day he wrote an appreciation of the situation to the effect that Napoleon had committed the serious blunder of exposing his communications north of the Danube to an attack. Nothing could now save him

except the fact that the Austrians could not fully exploit their advantage because they could not feed a large army from the exhausted country in rear of the French. Nevertheless, they could strike a serious blow at the enemy as he crossed the Danube and he, Mack, would give the necessary orders for this during the next few days. The orders were issued in due course, but by that time not only was Napoleon across the Danube, but the Austrians were in no condition to undertake any serious operation. Units and formations were disorganized by the faulty staff arrangements already mentioned, and had been moved backwards and forwards until the men were utterly exhausted. Their condition was not improved by the fact that rain and snow fell almost continuously.

When the advanced guard of the force sent to oppose the French crossing of the Danube was consequently easily defeated at Wertingen, Mack drafted orders for the retirement of the Army by the roads by which it had entered Bavaria. But before he had time to issue them, he realized that it was too late. Napoleon had already intercepted him on these roads.

He next drew up his forces so as to give battle facing towards his rear, and then thought out a new plan by which he would cross the Danube at Guntzberg not far from Ulm, move round the French rear and join the Russians. This was attempted; but the passage of the river at this point was frustrated by the 59th Regiment of French Infantry, which charged over the bridge just repaired for the crossing of the Austrians and actually advanced to the attack in the face of 40,000 of the enemy. In this assault 1,600 French infantry overthrew first 2,300 Austrian infantry who were about to cross the bridge, and then went through three more battalions drawn up in support. They next charged another Austrian regiment at Guntzberg and, repelling an attack by superior numbers of cavalry, finally caused the whole of the Austrian Army, over 40,000 strong, to retreat in utter disorder into Ulm. It must not be assumed from the result of this action that the Austrians were bad soldiers. Aspern and Wagram proved that they were able to hold their own. The truth is that they were so much disorganized and demoralized that they were unable to undertake the simplest operations.

This defeat drew from Mack a shower of fresh plans. At one time he thought of retiring toward the Tyrol. He next contemplated crossing the Danube at Ulm and marching across the enemy's communications, and half of his force indeed had actually commenced this move when he decided to remain at Ulm, having come to the conclusion that Napoleon was not trying to surround him, but was

bent on returning to France as quickly as possible, to deal with a revolution which according to rumour had broken out in Paris. Ferdinand, the nominal leader of the Austrian Army, was powerless to interfere effectively. He had correctly appreciated the situation from the very beginning of the campaign and had constantly urged Mack to take action which would have prevented his envelopment and have enabled him to join the Russians who were moving to his support before Napoleon could reach him. But Mack was consistent in this, that he declined to depart from the policy which he had forced upon the Emperor. Ferdinand had not accepted all this without protest. He wrote several times to the Emperor to draw attention to Mack's extraordinary behaviour, but received the reply that reliance must be placed in the Chief of Staff, and that in case of disagreement the latter's views must prevail. Finally, a few hours before the inevitable happened and the main Austrian Army in Bavaria was surrounded in Ulm, and in spite of Mack's vigorous protests that he would vouch for his safety with his head, Ferdinand escaped with eleven squadrons across the French communications to Bohemia.

As for Mack, he continued in his belief that the French were in full retreat until he was called upon to surrender. His Army was taken into captivity. He himself was allowed by Napoleon to go free, in return, so some say, for the valuable services rendered by him to the French in this campaign and for the purpose of continuing those services should the Austrians allow him to. When he left Ulm he turned to his staff, who had accompanied him to his carriage, and said, "I have saved the Austro-Hungarian Monarchy and am now going to His Majesty in Vienna." On reaching the capital he was placed under arrest and eventually tried and condemned to death by a court-martial. The sentence was, however, commuted.

In these circumstances it cannot be said that the Austrians were defeated principally as a result of the military operations of the enemy. The fact was that their Army had ceased to be an efficient fighting machine before it met the enemy. Whatever Napoleon did, he was bound to beat it with equal or even inferior numbers provided he could meet it. It is beside the question to argue that the Austrians should not have advanced as far as the Iller ; that they should have retired before they could be surrounded, either to the river Inn or to the Tyrol ; or that they should have cut across Napoleon's communications. They were not in a position to do any of these things. Mack had committed himself to an advance to the

Iller whatever happened. The question had been debated in Council before the troops entered Bavaria. Ferdinand had protested against it, supported by the Archduke Charles and by the General Staff, but they had all been overruled. Mack was not likely to go back on this.

It is true that he did contemplate retirement to the Inn and the Tyrol, but by then his Army was not in a position to carry out this movement as a whole. Portions of the force could have done so, but the bulk was by then far too much disorganized to undertake a march of more than a few days. This applies also to any attempt which might have been made to cut across the enemy's communications. The way to this was open on several occasions when Napoleon was in error as to the actual whereabouts of the Austrians and had brought nearly all his troops south of the Danube. But a starved force of 70,000 men cannot march through an exhausted country, and even if the Austrians could have done so, Napoleon was not likely to leave them unmolested.

There can be but one conclusion as to the responsibility for this disaster to the Austrian arms. Austria lost this campaign not because her Commander-in-Chief and his military experts committed strategical or tactical mistakes, or gave unsound advice in regard to operations, but solely because her Government, for purely political reasons, overruled the advice of its constituted military authorities and committed itself to a policy which had from the very beginning been condemned by its responsible experts.

The Austrian Army was a "Lost Army" before it even took the field.

THE WATERLOO CAMPAIGN:

WELLINGTON'S POINT OF VIEW

(With Four Maps)

BY MAJOR-GENERAL SIR W. D. BIRD, K.B.E., C.B., C.M.G., D.S.O.

WELLINGTON'S last campaign was to be a higher test of soldiership than even the others, for in Belgium, in 1815, he was commanding an army of far lower quality than his troops in the Peninsula ; close cooperation with the allied Prussian Army was even more essential than it had been with the Spaniards in the early days of the Peninsular War ; the topography and conditions were quite different from those to which he had been accustomed in Portugal and Spain ; and his opponent was the greatest general of the day.

The topography of Belgium and of the Franco-Belgian frontier, though resembling that of Gascony in some respects, was in marked contrast with the rough uplands of the Spanish Peninsula (Map 1). Broadly speaking, the area north of the Scheldt was low-lying, marshy, and trenched by a number of watercourses and canals. The whole borderland between the Scheldt and Meuse was undulating, but covered in many places with great forests, and east of the Meuse the swampy, rugged, forest area of the Ardennes and the steep hills of the Eifel stretched away towards the Rhine.

In Belgium itself the space between the Scheldt and the Senne consisted of rich, agricultural, undulating land, which merged in its northern portion into the low-lying alluvial plain. In the southern part of this space the streams, which often flowed in shallow valleys with steep, even abrupt, sides, were marshy, and the fords were infrequent ; but there were generally a number of villages placed on the slopes above their banks. Eastward the area was, on the whole, of the same character, the valley of the Sambre being similar to that of the smaller streams ; but an important feature, because it was not crossed by a main road, was the wide swampy tract drained by the upper Dyle. Belgium had so often been a theatre of war that the fortresses were numerous, but many

were out of repair or had been dismantled. On the other hand, a number of châteaux and farmhouses were enclosed by strong walls, and were capable of being quickly put into a state of defence.

The principal roads, *pavés* 30-40 feet in width and bounded by unmetalled portions also 30-40 feet wide, are shown on Map 1. Generally speaking, they focussed at Ghent and Brussels and then led to Antwerp; and lateral communication on *pavés* in the area near the frontier was limited, therefore, to the route from Tournai by Ath and Mons to Namur, and to that from Audenarde by Grammont, Hal or Braine le Comte to Nivelles, and thence to Namur. There were, of course, also a number of unmetalled tracks leading across fields, which were usually unfenced; and these tracks, and the fields also, could be passed by troops of all arms in dry weather, but were barely practicable after heavy rain.

The political situation in 1815 was perhaps unusually intricate. After Napoleon's abdication in 1814, a congress of great Powers—Britain, Russia, Austria, Prussia, France—had assembled at Vienna for the purpose of rearranging Europe. The Prussians had then expressed a wish to annex Saxony, the Russians to take Poland, both proposals being vigorously opposed by the Austrians on whose side were the British and French. And so acute did the dissension in regard to these matters become, that it is even said that both the Czar and the King of Prussia intended to leave the Congress of the 5th of March, 1815. Meanwhile, the people of France, owing to arbitrary and foolish actions by the restored Bourbon dynasty, and by the *émigrés* who had come back with the Bourbons, were in a state of sullen discontent, and they were not without sympathizers in England. And thinking perhaps that, in such circumstances, Napoleon's proximity to France—he was then at Elba—was too dangerous to be tolerated, the Ministers of Louis XVIII proposed to the Congress that he should be moved out of Europe. Napoleon heard of this proposal, and, being aware of the state of feeling in France, he decided to slip away from Elba and return to France during the temporary absence of the British vessels that were guarding the island. He escaped, therefore, on the 26th of February, landed near Cannes on the 1st of March, and, after some precarious experiences, was welcomed by the Army and entered Paris on the 20th of March, the Bourbons having already left the capital. Napoleon now issued a letter offering peace to the sovereigns of Europe, but he also began to prepare for war, and to take steps to put down Royalist forces which had risen, or were being organized, against him both in the south of France and in La Vendée.

The effect of Napoleon's return on the policies and tempers of the great continental Powers was immediate and remarkable, for they at once became united ; and although in England, at any rate, there were those who sympathized with Napoleon, the British Government also at once joined the others in declaring that he had placed himself outside the pale of civil and social relations, and that, as the general enemy and disturber of the world, he was abandoned to public justice. In addition, Austria, Russia, Prussia and Great Britain signed a treaty engaging themselves each to maintain an Army of 150,000 men in the field until Napoleon was again a fugitive ; Britain granting a subsidy of £1,700,000 to each of the other Powers for their 150,000 men, and, since she could not herself raise 150,000 men, also paying to the State that furnished the men required to make up this total, £20 for each infantryman and £30 for each cavalryman. Subsequently, contingents were also promised by Bavaria, Wurtemberg, Baden, Brunswick, Nassau and Hesse ; so that ultimately France was to have been invaded by 655,000 men, who were to advance on a frontage stretching from the Mediterranean to the Channel, the British contingent (including the Hanoverians, for Hanover was then under the British Crown, and other Germans and Netherlanders) being in Belgium on the right of the line (Map 2).

When Wellington, who had been one of the British representatives at the Congress of Vienna, reached Brussels at the beginning of April to take command of the contingent in British pay, there were in Belgium, under the Prince of Orange, about 35,000 British, Hanoverian and Dutch-Belgian, that is Netherland, troops, 7,500 being British, and of these two-thirds had been in garrison in the country pending the decisions of the Congress of Vienna as to its future. Fourteen thousand Saxons, who were subsequently sent away because some of them mutinied, were on the Meuse, and about 30,000 Prussians on the Rhine. While larger numbers were being brought up on the whole allied front Wellington submitted to the British Government a memorandum on the situation. In this he pointed out that, while the great majority of the population of France seemed at the moment to be decidedly averse to Napoleon, 30,000 men were said to be actually in arms against him in the west of France, and a large force hostile to his rule was being organized in the southern provinces, the troops that Napoleon could put into the field against all his enemies did not apparently exceed 180,000. On the other hand, Wellington estimated that, by the 1st of May, there would be at least 60,000 British, Hanoverian and Netherland

forces under his command, 63,000 Prussians would be standing between the Meuse and Rhine, and 146,000 Austro-Bavarians on the upper Rhine; and behind these forces masses of Prussians and Russians would be on the move westward. Wellington suggested, therefore, that the Allies should take the offensive on the 1st of May, in order both to prevent the groups of Royalists from being broken up, and because there seemed to be a good chance of defeating the French Army on which Napoleon's power rested. Another reason in favour of an early offensive was that the French might desert Napoleon's cause altogether if their country were quickly invaded. This plan, however, was soon abandoned, owing partly to reports of the failure of the Royalists in the south of France, partly to information that the French armed forces were far stronger than had been supposed; and, in addition, the proposal was not favourably received by the Russians and Austrians. In fact, so confident of victory were the Allies, that the final act of the Congress of Vienna, which fixed the boundaries of most of the States of Europe for about fifty years, was signed on the 9th of June.

The Allies, therefore, remained stationary while their forces were being concentrated for the invasion of France; the troops in Belgium forming a covering and somewhat exposed group, although Wellington's forces were supported by the Belgian fortresses, the most important of which—Antwerp, Ostend, Nieuport, Ypres, Tournai, Mons, Ath and Ghent—had been repaired and strengthened, and were garrisoned at first by no fewer than 27,000 men; and the Prussians were protected by such physical features as the Sambre and the rugged Ardennes (Map 1).

Although Wellington was aware that there were in April considerable numbers* of French on the north-western frontier of France, where their troops were constantly on the move, a good deal of doubt was entertained by him whether hostilities would in the end break out; for there seemed a reasonable probability that Napoleon would be dispossessed of power and a republic proclaimed in France. It appears, however, that Wellington thought that, if Napoleon did succeed in maintaining his power in France, his best policy would now be to stand on the defensive; and the fact that the roads leading to the Meuse and Sambre had been broken up on the French side of the frontier was in favour of the view that

* I Corps, Lille, 20,000; II Corps, Valenciennes, 25,000; III Corps, Mezières, 10,000; IV Corps, Metz, 15,000; V Corps, Strasbourg, 18,000. The troops on the Belgian frontier were covered by the fortresses of St. Omer, Cassel, Baileul, Aire, Bethune, Lille, Arras, Douai, St. Amand, Valenciennes, Cambrai, Le Quenois, Landrecies, Avésnes and Maubeuge.

this system would be adopted. Politically to have stood on the defensive would have been in accordance with Napoleon's profession of desiring peace. In addition, it could be argued that the invasion of France by the Allies would not only have rallied the population against the invaders, but much sympathy with the French people would have been aroused in England; for the Allies would only be invading France in order to set up a dynasty, the Bourbon, which the French did not want. From the military point of view the Duke was of opinion that, if the French remained on the defensive and succeeded in holding out, the Allies would be unable to feed their large forces in a country already exhausted by the invasion of 1814. They must, therefore, in the end inevitably fall back in order to obtain subsistence, and if they did so the Coalition might collapse.

Napoleon might, however, decide to take the offensive with the view of preventing the occupation of part of France by the enemy, and the consequent loss of its resources; also of attempting to break up the alliance by snatching a victory before the forces opposed to him were overwhelmingly strong; and if he did so, Wellington thought that the attack would be made on the Army under his command, rather than against the Prussians. The Anglo-German-Netherland Army, as Wellington wrote to a friend in May, was, in his opinion, "an infamous army, very weak and ill-equipped, and a very inexperienced staff" (Map 3). This somewhat sweeping condemnation has been questioned, particularly as regards the staff. It is, however, certainly true that about half of the British infantry battalions were composed of young and inexperienced officers and men, and the artillery was in much the same case. And it is also true that many of the foreign elements—there were Dutch, Belgian, Hanoverian, Brunswick and Nassau troops—except the Hanoverians of the King's German Legion, which had served or served in part in the Peninsula,* were believed not to be reliable. It may be accepted, then, that on the whole the force † was far from being efficient, and that it was probably not so

* There were about 30,000 British, 6,000 King's German Legion, 26,000 other Germans, 30,000 Netherlanders in Wellington's army.

† The force under Wellington was organized in two corps (the first under the Prince of Orange, the second under General Hill), a reserve, independent cavalry, and a cavalry reserve. The I Corps comprised the 1st British Division (two British brigades), the 3rd British Division (one British brigade, one K.G.L. brigade and one Hanoverian brigade), and the 2nd and 3rd Netherland Divisions, each of two brigades, one brigade of the 3rd being German; a total of 25,400 fighting men with 48 guns. The II Corps consisted of the 2nd British Division (one British brigade, one K.G.L. brigade, and one Hanoverian brigade), the 4th Division (two British brigades, one Hanoverian brigade), the 1st Netherland Division (two brigades), and the Dutch Indies brigade; 24,000 fighting men with 40 guns. The reserve included the 5th Division (two British brigades, one

efficient as the Prussian forces, and also several degrees less efficient than the French Army. It could reasonably be argued, therefore, as Wellington apparently did argue, that if the Anglo-German-Netherland Army and its Tory leader—Wellington was a Tory in politics—could be beaten, of which there would be a good chance, the British Tory Government might fall, and a party, the Whigs, which if speeches meant anything was not unfavourable to Napoleon, might then come into power in England. Further, in spite of the Belgian fortresses, it would in the physical sense be easier to attack the Anglo-German-Netherland Army than the Prussian, which was covered by the Sambre and the Ardennes; and the Allies, that is Wellington's force and the Prussians, could less rapidly combine to meet an attack against either of their Armies than one against their point of junction. Again, by an advance in the district between the Scheldt and Senne, Napoleon could strike at the British line of communication to Ostend and Antwerp, and apparently the opening of a new base in Holland or Germany would not have been so easy as was this manœuvre in 1813 in Spain, for in 1815 Wellington had no supply ships under his immediate control as he had in 1813. Also, if Wellington were beaten or forced to retire without fighting, the Allies would lose Ghent, where Louis XVIII had retired with his court, and Napoleon could then claim the political advantage of having made his rival look supremely foolish by chasing him from his sanctuary.

We now know that Napoleon adopted the alternative plan and decided, as some suppose, to strike first at the Prussian Army, which, as he knew, was nearer to the frontier and more closely concentrated than the Anglo-German-Netherland force; and the headstrong leader of which, Blücher, was, as he thought, more likely to give battle than the level-headed Wellington, who had shown in Spain that he would only fight when it suited him to do so. Others believe that Napoleon resolved to follow the policy of his campaign of 1796 and drive the allied Armies apart; and, in this connection, some adverse comment has been made because the Allies did not at once perceive this probability, although it can surely be argued with equal force that Napoleon would not care to repeat a plan that had already been practised.

Hanoverian Militia brigade), 6th British Division (one British brigade, one Hanoverian brigade), and the Brunswick and Nassau contingents; 20,000 fighting men with 64 guns. The strength of the cavalry, about half were British, was 14,500 with 44 guns, and 12,000 men with 20 field guns were in the end in garrison. The Prussian Army was organized in four corps, three being each just over 30,000 strong, and the other, the III, about 25,000; and its total was about 120,000 men with 296 guns.

Wellington and Blücher, however, could not possibly be aware of Napoleon's projects, and the hypothesis made by Wellington of what Napoleon was likely to do was just as reasonable as was the action taken by him. At any rate, as Wellington wrote on the 11th of May :

" In the situation in which we are placed at present, neither at war nor at peace [it seems that technically we were at war with Napoleon, not with the French people], unable on that account to patrol to the enemy and ascertain his position by view, or act offensively upon any part of his line, it is difficult, if not impossible, to combine an operation, because there are no data on which to found any combination. All we can do is to put our troops in such a situation as, in case of a sudden attack by the enemy, to render it easy to assemble, and to provide against the chance of being cut off from the rest."

Before this there had, at the very beginning of May, been strong reports that the Imperial Guard had marched north-eastward from Paris, and that Napoleon was about to visit the frontier ; and orders were given in consequence for the cantonments of Wellington's troops to be closed with a view to their early junction if attacked. Also, on the 3rd of May, a meeting took place between Wellington and Blücher at which an arrangement may have been made—there is some doubt about the matter—that, in case the French advanced against the Allies, the force under Wellington was to concentrate forward in the area between Gosselies and Marchiennes, the Prussians between Charleroi and Sombreffe. Wellington, in addition, understood that Blücher would not allow the Anglo-German-Netherland Army to be beaten by superior numbers of the enemy. And, according to a previous agreement, if the two Armies were defeated by the French they were to retreat towards Liège and Maastricht, and then, if necessary, eastward, the British for the moment abandoning their communications to Ostend and Antwerp.

Throughout May reports kept coming in and then being denied of concentrations of French forces on the upper Sambre at Maubeuge and near Valenciennes, and, in addition, of movements of troops towards Givet on the Meuse.* There were also, towards the end of May, statements in the French newspapers that Napoleon had quitted Paris, but it was soon ascertained that he was still in the capital. And now his reception at the ceremony of the Champ de

* On the 17th of May it was thought that the I Corps, under D'Erlon, 24,000–25,000 strong, was at Valenciennes ; the II Corps, Reille, 20,000–25,000, at Landrecies ; the III Corps, Vandamme, 25,000, at Givet ; the IV Corps, Gerard, 20,000, at Metz ; the V Corps, Rapp, 15,000, at Strasbourg ; the VI Corps, Lobau, 10,000, at Laon ; and the Guard, 15,000–20,000, in Paris.

Mai, a national assembly or convention of representatives of all classes which had been held by Charlemagne (it took place in 1815 on the 1st of June), so greatly strengthened his position that the proclamation of a republic was no longer probable.

Early in June news was received that Reille's II Corps had marched towards the centre of France from the vicinity of Avésnes, and that troops from Metz and Strassbourg were going in the same direction ; and it was surmised that these forces might have been sent away to put down the insurrection in La Vendée. On the 6th, however, Wellington heard that an attack by the French was imminent, that probably a false attack would be made on the Prussians and that the main attack would be delivered against the Anglo-German-Netherland force. On the 10th, there was a rumour that Napoleon had arrived at Maubeuge, and on the next day that he was at Avésnes ; but again these rumours were contradicted, and according to another report the French intended to make their attack in the direction of Namur. On the 12th or 13th of June intelligence was received that the French outposts between the roads leading from Valenciennes and Bavai had been strengthened, and that Reille's II Corps had reached Maubeuge, also that the headquarters of the French Army was now at Avésnes. It was stated, further, that there were 100,000 troops between Givet, Mézières, Guise, Maubeuge and Phillippeville, and that a concentration was being made in the direction of Maubeuge. It was also reported that an attack would be launched by the French when Napoleon reached Avésnes. On the 13th, news again came in that the Emperor had joined, or was about to join, the troops facing Belgium, and that an attack was imminent. But Wellington judged from one of Napoleon's recent speeches that he would not leave Paris so soon ; and he thought, in any case, that the Anglo-German-Netherland field force and Blücher's Army were now too strong to be defeated, for the former comprised about 95,000 fighting men with 196 guns, and the latter about 120,000 fighting men with 296 guns.

On the 14th of June, however, information again came in that Napoleon had left Paris on the 11th of June, and that the French troops had only been concentrated at Maubeuge to be reviewed, and had then moved to Beaumont and Pont-sur-Sambre, carrying food for eight days. It was now estimated that there were 80,000 men as far as Beaumont and 100,000 as far as Phillippeville, that is 100,000 between the two places. The British learned in addition that part of the corps that had been near Metz had reached Sedan

and Mezières on the 12th of June (Map 3). Nevertheless, on the 15th, Wellington seems to have been incredulous in regard to an offensive by the French, for he then wrote a long letter to the Czar on the subject of the general advance of the allied Armies. According to some accounts he was still waiting for news from his famous intelligence officer Grant, who was in France, before taking definite action ; but, as it happened, Grant's accurate report of Napoleon's move to the frontier on the 12th of June only reached Wellington on the morning of the 18th.

During the 15th of June Wellington heard, however, that only National Guards remained at Maubeuge ; at about 3 p.m. he was informed that the French had attacked the Prussians at Thuin and Lobbes on the Sambre ; and soon afterwards news reached Wellington's headquarters at Brussels that the Prussians were fighting at Charleroi. At 6 p.m. orders were given for the various formations of Wellington's Army to go to their places of assembly, for he wanted further news from his right before committing himself definitely to concentrating in any particular direction. It seems, indeed, that Wellington still thought that Napoleon's principal attack would be against the British and their associates ; and it will be seen from Map 3 that this was far from being impossible, for the attack on Charleroi might be merely the feint of which Wellington had already heard, and the main body of the French might advance from the direction of Beaumont on Mons. At 8 p.m. a letter came in from Gneisenau, the Prussian Chief of the Staff, that the French had crossed the Sambre in force, and that Napoleon himself was present in front of the Prussians with his Guard. Two hours later a report was received that there were no French near Mons, and then, but not till then, were Wellington's troops directed to march on Enghein, Braine le Comte and Nivelles. Orders for further movement of the troops to Quatre Bras were issued apparently in the early hours of the 16th of June. Meanwhile, Blücher had already, at 10 p.m. on the 14th, ordered his II, III and IV Corps to move towards or to Sombreffe, but Wellington did not receive notice of the action that had been taken until the evening of the 15th of June.

Now that Napoleon's plans and actions are known it is not difficult to censure both Wellington's dispositions and his delays. It is said, for instance, that his force was too widely cantoned, but this it must be supposed was done for reasons of subsistence ; and that troops should certainly have been placed so as to cover, or be able easily to reach, the area of concentration between Marchiennes

and Gosselies, the Prussians being presumably asked to move away eastward. It is also an obvious comment that the concentration of Wellington's force should have been made sooner than it was.

Wellington apparently disliked changing his mind—it is a characteristic of men of his type—and some one said of him that his judgment, as every one's is more or less, was influenced by his own wishes and his conception of what was required. Wellington's inclination, therefore, was to wait until the latest moment before altering his conceptions, and he had already shown this tendency more than once in the Peninsula, where the concentration of the troops was at times postponed until the enemy was almost on them. The risk then, however, was not so great, for Wellington's Peninsular soldiers were far more efficient than those of the troops of 1815, by whom great-coats were not carried lest they should be overweighted. And in the Peninsula Wellington was continually in the front line, even in the outposts, seeing and hearing things for himself. But in 1815 it seems that he remained in Brussels, thirty-five miles from the frontier, and about the same distance from the headquarters, at Braine le Comte and Ath, of his two corps. And it is to his staying in Brussels that Wellington's slowness and the dangers that sprang from it may be partly ascribed.

It is possible that Wellington's slackness during May and June, 1815, was due to psychological causes. He had now become a very great man, and he had tasted in Vienna the sweets of fame. In the Peninsula his headquarters were remote as a rule from society and its temptations, but on, or soon after, reaching Brussels, he found in the city a good many aristocrats, his friend the Duke of Richmond, and his family, among them. Inclination, then, and pride may both have combined to keep the Duke in these pleasant surroundings, when if he had behaved as he did formerly he would have been among his leading troops. It would never do, he may have thought, to show anxiety, and continual posting to the frontier outposts, or removal of his headquarters southward, might have been construed as fear. Perhaps, then, Wellington's greatness may have worked to harm him, for even on the night of the 15th of June he not only remained in Brussels and attended the Duchess of Richmond's ball there, in order to make sure that it should be a success, but allowed a number of officers also to attend the dance.

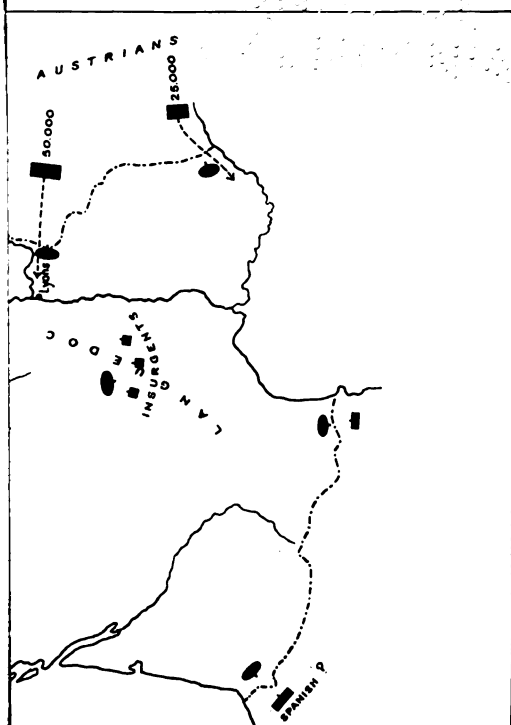
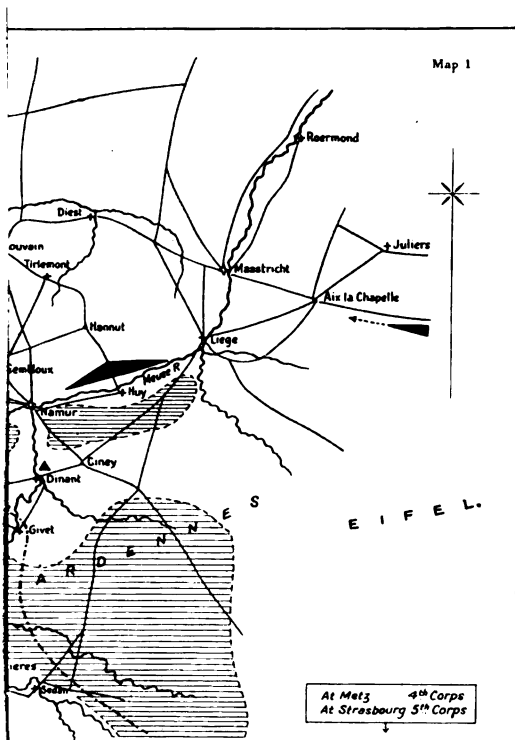
The rest of the tale must be quickly told. Wellington owed the presence of a division, the 2nd Netherland, a Netherland-German division, of his Army at Quatre Bras early on the 16th of June, and

the power of communicating easily with Blücher, who was at Ligny, to the fact that the divisional commander disobeyed his first order to move on Nivelles. It seems that Wellington was under a misconception as to the positions of his forces on the morning of the 16th, and in consequence sent off at 10.30 a.m. from near Quatre Bras a letter to Blücher, which was received at noon, implying that a larger number of divisions were near Quatre Bras than was the case. Blücher had already heard from the Prussian military attaché at Wellington's headquarters that it was expected that a strong force of the Anglo-German-Netherland Army would be at Nivelles at 10 a.m. on the 16th; and it is possible, although this also is questioned, that the statements in the letter, which seemed to show that Wellington was carrying out the arrangement of the 3rd of May, fortified Blücher in his intention of fighting at Ligny instead of falling back. Wellington also verbally promised, in an interview with Blücher, which took place at about 1 p.m., to help the Prussians if not himself attacked (Map 4). In the event Wellington not only could not send assistance to the Prussians, but himself barely maintained his ground at Quatre Bras. And he probably in part owed his power to do so to the reputation that had been gained in the Peninsula. For the French generals had so often in Spain and Portugal found British troops in force where they had not expected them, that they became cautious of attacking Wellington's Army; and it happened that all of the higher commanders of the French group which fought at Quatre Bras had served in Spain. At any rate, the attack of the French on the 2nd Netherland Division was not launched until 2 p.m., and Wellington's reinforcements began to arrive soon afterwards. Blücher, however, three of whose corps were engaged, was defeated at Ligny, where the battle began at 2.30 p.m.

Napoleon, therefore, had won the first point, for with an apparently concentrated Army (he actually crossed the frontier with 125,000 troops and 344 guns) he had attacked and beaten the Allies before they could collect all their forces. And the issue of the campaign in Belgium would depend on whether he could prevent these forces from uniting, since united they would numerically be so superior to the French that they would probably defeat them. The Allies both retired on the 17th of June, in heavy rain which came on in the afternoon, the Prussians to Wavre, after being joined by their IV Corps, the Anglo-German-Netherland Army part to Hal, the bulk to Waterloo. But before his troops marched off a message was sent by Wellington to Blücher that a battle would be

fought at Waterloo if Wellington's force were supported by one Prussian corps. The reply, promising the dispatch of two corps, was received apparently in the very early morning of the 18th of June. And, since Wavre is only ten to twelve miles from Mont St. Jean, a village behind the centre of Wellington's line of battle and just south of Waterloo, that is six or seven hours' march even on bad, rain-soaked tracks, it may be said that Napoleon had now failed; unless he could prevent the Prussians from coming to Wellington's assistance, or could snatch a victory from Wellington before the arrival of the Prussians.

Three Prussian corps were sent to the field of Waterloo in the end, while the other resisted at Wavre a French force of 33,000 troops with about 100 guns. The first of the Prussian corps arrived on the ground before Napoleon, who had 72,000 men with 246 guns there, was able to force a decision against Wellington's Army, 67,500 men with 156 guns, and he was beaten.



A GALLANT COMPANY

DUTY AND PHYSICAL PAIN

[This article is from a book, "The Gallant Company," by Sir John Fortescue, K.C.V.O., which is being published by Messrs. Williams and Norgate, Ltd., 14 Henrietta St., Covent Garden, W.C.2, at the price of 7s. 6d. net.]

THERE are few things that surprise us more in reading the old campaigns of the British Army than the courage with which men withstood physical pain. It was a point of honour in particular with a self-respecting soldier to utter not a sound under the knife of a surgeon, and such a man as Sir John Moore would, even in extremest agony, control his very features so that they should show no sign of suffering. Certainly, men's powers of endurance in those days seem marvellous and the liberties that they took with themselves almost incredible. At the storm of Ciudad Rodrigo, Colonel Colborne, later Lord Seaton, was struck on the right shoulder by a musket ball, which broke off the head of the upper bone of his arm. He was treated by the surgeons and returned to duty; but some months later he felt pain four inches lower down in the arm, and it was then found that the bullet had broken the arm in a second place and was firmly embedded in the bone. "The pain that he suffered in the extraction of the ball," says Harry Smith, "was more than even his iron heart could bear. He used to lay his watch on the table and allow the surgeons five minutes' exertions at a time, and they were three or four days before they wrenched the ball from its ossified bed." However, Colborne was at the front and in command of his battalion within three weeks; and this, compared with men who went through less trying operations, seems a long time. At the battle of Salamanca Sir William Beresford was struck by a bullet, and the wound refused to heal, to his great distress, for he pined to be at work again. After a time he wrote a long letter to Wellington to say that the surgeons had "laid open the wound"—no doubt by a long and deep incision—on the previous day, and removed a

fragment of his coat, and that he would soon be back at the front. George Napier tells us that, when he was lying wounded in a Portuguese hovel, one of his men came to see him on the evening of the action. The two conversed for some time before Napier noticed that the man had but one arm, when it appeared that the limb had been amputated, but that the man had none the less walked out to visit his officer (nine miles out and nine miles back) on the pretext of "forgetting the anguish." Perhaps the most remarkable example of all is that of Ensign John Shelton, who, having had an arm shattered at the storm of San Sebastian, calmly stood up outside his tent while the surgeons took it out of its socket. Anæsthetics have banished in great measure the need for such trials of fortitude ; yet it cannot be doubted that, if anæsthetics had never been discovered, the officers and soldiers of the world would still make it a point of honour to endure pain in silence. Self-control is the first-born of discipline.

But we are not here dealing with points of honour, but with performance of duty ; and we must now consider examples of pain manfully borne as a matter of duty. These are not difficult to find or to think of. Every wounded man who refuses to quit the field, nay, every man who, in spite of raw feet, keeps his place day after day on the march, defies pain for the sake of duty ; and there are thousands of such men living all round us. In that way the new British Army falls no whit behind the old. I give but one instance. At the action of Le Cateau on the 26th of August, 1914, a subaltern of artillery was left alone with one of his guns in danger. His men and half of his horses had been shot down, and he himself had one arm broken by a bullet. None the less he climbed into a driver's saddle, and with one horse in the wheel, one in the centre, and one in the lead galloped his gun out of action. The old army can produce no finer example of pain conquered by sense of duty than this ; and no doubt hundreds not less striking could be found during the late German war. Yet even so it is worth while to recall the French cavalry officer, who, being wounded in the arm at Waterloo, went to the rear, had his arm amputated, and then returned to take command of his squadron.

There is yet another incident which is worthy of commemoration in one of our obscure wars of the past. In the years 1800 and 1801 there was much petty fighting in the extreme south of India during the pacification which followed upon the storm of Seringapatam and the death of Tippoo Sahib. The work for the most part was blind and difficult, being carried on by small columns in dense

jungle against a wary and treacherous enemy whose favourite weapon was a broad, keen blade not unlike a scythe, but without the curve and fixed vertically at the end of a long shaft. Working with a small flanking-party of sepoy through the forest, Lieutenant Parminter of the Madras Native Infantry came upon a cleared space, when he was suddenly assailed on all sides by greatly superior numbers. His sepoy, smitten with panic, took to their heels, and Parminter stood up to the enemy alone. For a time he defended himself successfully till he tripped and fell over the stump of a tree. He was instantly pierced in five places by five blades, one of which was driven clean through his shoulder and pinned him to the earth. While he lay helpless a tribesman ran up with musket and bayonet to despatch him, whereupon Parminter by a desperate effort wrenched the blade out of the ground, and rising to his feet with the weapon still fast in his shoulder, turned upon his opponent with his sword and despatched him. Meanwhile the sepoy had rallied, and, seeing him renew the fight, ran forward to his rescue, whereupon the whole body of the enemy, who had been hesitating in utter amazement, turned and fled in dismay. Of the subsequent career of Parminter, whether he lived or died, whether he received reward or was neglected, I have been unable to discover anything. By his name he was a Devonshire man, and that is all that I can even conjecture about him. But his brother-officers never forgot this extraordinary instance of his courage, and one of them happily recorded it in a book. What the pain must have been when he hove the blade out of the ground with the edge sawing through his flesh is not pleasant to think of. And let it not be said that he made the effort only to save his own life. He did far more than that. He brought his fugitive flanking-party forward again, dispersed his enemy, and so secured the safety of the main column, which was the particular duty assigned to him.

Then there are the men who conceal their wounds in order not to fail in their duty. No one knew that Picton had been shot at Quatre Bras until his corpse was examined two days later at Waterloo. There is again the classical instance of the twelve men of the Twenty-second (Cheshires) who were wounded at the battle of Hyderabad, in the Scinde campaign, but said nothing about it lest they should miss another fight. In the course of a long, hot march their strength failed them, and then the truth was discovered. Two of them had actually been shot through both legs; and yet it was long before they fell out. Perhaps the most extraordinary case of all is that of the woman, Christian Ross, who fought through many of Marl-

borough's campaigns as a private in the ranks of the Scots Greys. She was wounded by bullets in two different actions, but never went near a surgeon, lest her sex should be revealed, and in some way contrived to recover without awaking suspicion. At last the top of her skull was carried away by a third bullet ; she was picked up for dead, and so her sex was discovered. It may be added that she kept a canteen at the front until the war ended, and, with the possible exception of Marlborough himself, was the most conspicuous character in the British camp.

But, apart from wounds, there are instances of men battling with sickness to the last extremity rather than fail in duty. We honour Marshal Villars, who, when very severely wounded at Malplaquet, called for a chair that he might continue to direct the battle ; but even more remarkable, to my mind, is the figure of Marshal Saxe at Fontenoy. He was nearly dying of dropsy ; he was so weak that he could not sit on a horse, but was carried about in a litter ; he was so thirsty, owing to his illness, that he was reduced to sucking a bullet ; the British had carried a position which he had thought impregnable ; the loss of the battle seemed so certain that the members of the French royal family were warned to quit the field. Yet the helpless, gasping man in the litter kept his head, made new and excellent dispositions, and turned defeat into victory.

Parallel instances of the struggle of duty and discipline against sickness are many in our military history. The case of General Wolfe, who throughout the operations against Quebec suffered agonies from stone, will probably occur to every reader ; but there is another a full century before Wolfe. In 1657 Cromwell sent six thousand men to Flanders to aid the French under Turenne against the Spaniards, and in 1658 these took the most prominent share in the victory of Dunkirk Dunes. Their commander was a certain Colonel Lockhart, who, like Wolfe, was afflicted with the awful torture of stone. Turenne decided to fight rather suddenly, and, in fact, gave Lockhart such short notice that he apologized for it, and offered to give his reasons for his determination. " I take the reasons for granted," answered Lockhart ; " it will be time to hear them when the battle is over." So at ten o'clock that night he placed himself at the head of his six thousand in a carriage, for he was quite unable to ride or walk, led them thus to the battlefield, and arriving there before the French, threw the red-coats at once into action, when they carried all before them.

Lockhart's task, however, was easier and more speedily ended than that of Wolfe, who was before Quebec for two months and a

half, and, after trying various plans and losing a great number of men, accomplished within that time absolutely nothing. Anxiety and a sense of failure are trying enough in themselves, and when to these was added awful physical pain, it is not surprising that Wolfe almost gave way to despair. As a last desperate venture he made the movement which brought on the battle of Quebec and resolved all his difficulties. But his success was due chiefly to the fact that his adversary, Montcalm, lost his head and played into his hands. If he had not, Wolfe would have added only one more to his previous reverses ; and, in fact, an English general of great repute told me that, after carefully examining the ground and studying the circumstances, he was of opinion that both Wolfe and Montcalm deserved to be tried by court-martial. But the fact remains that Wolfe, though in constant torture, kept control of his nerves, whereas Montcalm, who had to bear no such burden, did not ; and so Wolfe fairly deserved his victory. It will be remembered that in the action Wolfe was struck by two bullets, one of them on the wrist which must have meant acute pain, before he received his mortal wound, but continued to direct the action as if he had been untouched. It is easy to understand why his last words should have been : " Now, God be praised, I can die in peace."

But there are other examples of English commanders, who, though almost disabled by pain and sickness, nevertheless wrested success from a tangle of difficulties by sheer force of will. Being less spectacular and dramatic than that of Wolfe, they are unknown or ignored ; yet they are even more worthy of commemoration.

The first is that of Brigadier-General Forbes, who in 1758 was entrusted with the duty of marching through a wild country of backwoods from Philadelphia in order to root out the French from their settlements two hundred and fifty miles away on the Ohio. A previous expedition, despatched on the same errand under General Braddock in 1755, had been cut to pieces ; so that the method of conducting the entire enterprise required to be carefully thought out. Forbes's experience of warfare had been entirely on the classical campaigning fields of Flanders and Germany, but he grappled with the new problem, found out the solution, and trained his men to meet the new conditions. His preparations were nearly complete when he was seized by an agonizing internal disease ; but none the less he retained his command and led his little column into the wilderness of forest, ravine and swamp which it was his duty to traverse. His disease grew worse, and the pain was sometimes so excruciating as to disable him altogether for a time. But he

fought against it and prevailed, for it lay with him to keep his little force in good heart. The solitude of the forest was appalling to English rustic lads, who, moreover, had been filled with tales of the terrible Red Indians that had destroyed Braddock. A very little might at any moment cause a panic. The least touch of irritability in the commander would suffice to upset men who were already half unnerved by their surroundings. Progress was difficult and slow, yet as each day took the column deeper and deeper into the heart of the unknown, apprehension necessarily increased. But through three long months Forbes, despite all his sufferings, contrived to preserve cheerfulness and confidence in his men. Then at last he met a party of French and Indians, and, through the rashness of a subordinate officer, the whole expedition very narrowly escaped disaster. The affair cost some three hundred killed, wounded, and prisoners ; but Forbes amid all his anxieties and bodily anguish preserved always his sense of the ridiculous. So he made light of the reverse and let the error of the officer pass with no more than a jest at his expense. Whatever he may himself have thought about the matter, he took care that his men should think nothing of it.

Then the elements turned against him. Heavy rain turned the rough roads, which he had made in order to carry up supplies, into seas of mud. Snow succeeded rain, and Forbes was brought to a standstill. It occurred to him that a tiny column of a few hundred men might yet succeed in reaching the French settlement, which was his object, and might be strong enough to master it. So though now sick unto death he chose out twenty-five hundred picked men, and with them he set out, leaving all tents and baggage behind, and himself travelling in a litter at their head. What misery and discomfort this must have meant to a man too weak even to walk, it is not easy to imagine ; but Forbes was taking a great risk, and would let no man bear the responsibility for him. For seven days they floundered on through the forest amid the cold and wet of late November, and on the seventh day they heard a great explosion. Advancing on the morrow they came at last to the French settlement. The fortifications had been blown up ; the barracks and store-houses were in ashes. The French had retreated sixty miles to the northward, leaving only a few huts standing ; and Forbes's work was done. He built a stockade round the huts, installed a small garrison in them, and christened them by the name—now that of a mighty city which has replaced the huts—of Pittsburgh, in honour of the great Minister, William Pitt.

It remained for him to bury the bones of the men who had perished at the defeat of Braddock. Having fulfilled this pious duty, Forbes at the beginning of December set out on his return journey. By great care and enormous difficulty he was brought back alive to Philadelphia. There his first thought was for his officers, for whom he caused a medal to be struck in commemoration of his march, authorizing them to wear it round their necks on a blue ribbon. He lingered on at Philadelphia until March, 1759, when death at last gave him rest. Though he had fought no brilliant action, he had successfully carried out an operation of enormous military importance, in the face of every kind of difficulty, hardship, and danger, and that while contending unceasingly against extremity of bodily torture.

The next example of will triumphing over bodily infirmity is of rather a singular kind. In January, 1759, a naval squadron and a small military force were sent out to capture the French islands of the windward group in the West Indies, notably Martinique and Guadeloupe. The troops were under the command of a feeble old man, who looked at the masses of mountain and forest in despair. He fumbled nervously at Guadeloupe, keeping his men in unhealthy situations and accomplishing nothing until more than two thousand out of six thousand of them were dead or on the sick-list ; and the force was actually on the brink of destruction when, fortunately, he died. The command then devolved upon General Barrington, who was so utterly crippled with gout that he could hardly move ; but hardly had he assumed it when the naval squadron was ordered off to look after a French squadron which was on its way to the West Indies. So many sailors had died that the Commodore, with the immediate prospect of an action before him, begged Barrington to spare him some soldiers to supplement his crews. Barrington loyally gave him three hundred men ; the Commodore sailed away ; and Barrington was left alone without a single armed vessel, with several ship-loads of rapidly perishing troops, with one untenable position, which the French were already preparing to besiege, on Guadeloupe itself, and, for his own particular comfort, the racking torture of gout.

What was he to do ? It was difficult to say, for a single French man-of-war, if one chanced to slip past the English squadron, would make havoc of his unfortunate force. But he made up his mind at least to do something, if only to save the lives of his men ; for soldiers—and for that matter any other bodies of men—if they are kept idle with nothing to think of except sickness and death,

will assuredly continue with increasing rapidity to sicken and die. Half of his force was dead or in hospital already ; and he was determined not to lose the other half. His predecessor had been afraid to attack Guadeloupe. The navy had taken for him the one place which he held ; but at every other spot where he had contemplated a landing there were batteries bristling with guns, and he feared to engage them. But Barrington argued differently. If, he reasoned, the French are defending every assailable point, they must have dispersed their force ; or, in other words, they are holding many positions with weakness and none in strength. If I have not men-of-war, I have at least transport ships, and in them I can carry a force superior to that in any isolated French battery, land them somehow at some convenient point and take these batteries, one after another, in flank or rear. In this way I shall devour the defenders of Guadeloupe piece-meal until none are left ; and then the island will be mine, and I can establish myself in the French fortifications and defy all enemies. Having been carried into a boat (for he could not walk) he reconnoitred the batteries and the shore from the sea, and came to the conclusion that his reasoning was sound.

His mind once made up, Barrington fell to work at once, and with complete success. The troops recovered their spirits—and therewith their health—immediately upon the prospect of a little fighting ; and with each little action they became more ardent and more daring, until at length nothing could stop them. It is a good deal to ask of soldiers to fight and march in the tropics with little respite for forty-eight hours, but Barrington's men cheerfully did it, and with an occasional day's rest were ready to do it again and again. The conquest of Guadeloupe was necessarily slow from the nature of the case, but in six weeks it was accomplished, and on the 1st of May the capitulation was signed. The ink of the signatures was scarcely dry when news came that powerful French reinforcements had reached Martinique. Had they arrived one day earlier, or had Barrington's final victory come one day later, these reinforcements would have saved Guadeloupe. As it was, the island was safely in Barrington's hands and remained there ; for the commander of the French expedition, finding that he was come too late, re-embarked his troops at Martinique and sailed sadly away.

The whole of the actual operations were carried out by two excellent officers, Colonels Clavering and Crump, for Barrington himself was unable to move. But, as both of them cordially

acknowledged, the entire scheme was Barrington's own. Barrington's was the brain that conceived and the spirit that made alive ; but he personally was condemned to remain stationary and inactive, and to wait wearily for news of success or failure. His days and nights must have been very long as he lay in the sultry heat tormented by mosquitoes and fighting against pain, longing that he could be with his soldiers, wondering what might be the meaning of the shots that he heard in the distance, and reflecting that, whatever might happen to Crump and Clavering, he and he alone must take responsibility for any miscarriage. But he endured the trial in patience and he had his reward.

Unfortunately there have been officers who lacked the strength to triumph over disease and anguish, as did Forbes and Barrington, but have none the less felt themselves impelled by a sense of duty, which can only be called mistaken, to attempt tasks for which they are utterly unfitted. One such man was General Elphinstone who held the command at Kabul during the disastrous occurrences in Afghanistan during the winter of 1841-1842. His health was already hopelessly broken when the appointment was offered to him in the year 1840, and he had made up his mind to go home on sick-leave, knowing that he was unfit for further work ; but the post was pressed upon him by the Governor-General and Elphinstone gave way, though very unwillingly, because as a soldier he considered it his business to obey orders. Had his health been good, he would have been the right man for the place, for he knew his business thoroughly as an officer, and was well liked as an amiable and courteous gentleman. But the situation at Kabul demanded at the moment a soldier of exceptional vigour of body and strength of will. The Governor-General, with extreme unwisdom, had placed all control in the hands of civilians, who had not only grievously mismanaged the political affairs, which rightfully lay within their province, but by ignorant and perverse mishandling had utterly demoralized the military force. They persisted that all was right, and neither they nor the Governor-General would listen to the soldiers who represented, with clearer insight, that all was wrong. The result was that the troops were despondent, and, feeling that they were commanded by civilians and not by soldiers, had lost confidence in themselves. Elphinstone was too much broken down to raise their spirit. He could hardly sit on a horse for one thing, which was sufficient to prove his physical weakness ; and, though he had sufficient control of himself to be always gentle and courteous, no matter how acute his sufferings, he had lost all power of will and

resolution, was incapable of giving orders, or, if he gave them, would countermand them at the shortest notice. Yet, from honest unwillingness to throw upon others the responsibilities—and they were terrible and cruel responsibilities—which lay upon himself, he refused to relinquish the command to any subordinate. To this cause principally are to be attributed the disasters and disgraces which overtook the force at Kabul itself and during the retreat through the Khyber Pass.

Yet Elphinstone had men under him, men of singular fortitude and devotion, could they but have commanded instead of him. He had among his five thousand men only one single officer of engineers, one Captain Sturt. In the first outbreak of insurrection in Kabul, Sturt had the misfortune to be caught by the insurgents unarmed and was only with difficulty rescued from the Afghan knives. He was brought into his quarters with two deep stabs in the side and shoulder and a third in the face. His mouth would not open, his tongue was swollen and paralysed, and the nerves of his throat were so affected that he could neither swallow nor articulate. Though faint and exhausted by loss of blood and pain he could not lie down lest he should be choked by the blood running down his throat, and though, of course, raging with thirst, was unable to quench it. For twelve hours he was unable to swallow anything, and then only a drop of water at a time with very great pain.

This happened on the 2nd of November, and for the next few days all was confusion, owing to the weakness and vacillation of Elphinstone. Sturt on his sick-bed was fretted to death, and on the 4th he drew up, in his capacity as engineer, a plan for the defence of the cantonments in which the troops were stationed. In the evening an officer arrived late to ask his advice as to the means of capturing a fort just outside there, and Sturt, who had just been made comfortable for the night, gave his opinion in every detail. The operation was attempted on the 5th but miscarried, owing to the neglect of his recommendations ; and Sturt, losing all patience, decided to return to duty next day. He could not put on any clothes, so at six o'clock next morning he turned out in a shirt and pyjamas and for four hours actively superintended the throwing up of earth-works and the posting of guns ; nor did he again return to the sick-list. Of course, only a man of remarkable physical strength could have done such things ; for the will alone cannot enable a man who has been in bed for a fortnight with high fever to walk across his room. But having such store of physical force, Sturt had the will to draw upon it to the utmost.

Another member of the garrison, next in command to Elphinstone, was Colonel John Shelton, the man who as a young subaltern had stood up unmoved at San Sebastian while the surgeons took his arm out of its socket. Whether his nerves were jangled by the operation or whether he was by nature perverse, Shelton had grown up into an odious and cantankerous man. He quarrelled with every one, and ruled his regiment as a martinet, enforcing discipline vexatiously and without sense of proportion. Still the men trusted him in the field, for he had studied his profession and knew it thoroughly. In Kabul he gave, if consulted, opinions which were almost invariably sound and correct, but turned sulky when they were rejected, as they invariably were, by the irresolute and distracted Elphinstone. The final retreat from Kabul was supposed to be conducted as a peaceful and voluntary operation under treaty with the Afghans, who, as a matter of fact, began attacking the retiring troops before they had even started from the city. The column, which nominally numbered five thousand fighting men, moved as a disorderly mob, encumbered by four times their number of miserable followers. The snow lay deep, the frost was bitter; and the sepoy were so utterly numbed with cold that they could not have used their arms even if they had had the heart, which they had not, to do so. The only troops that retained some spirit and discipline were the English, of whom there were only a few gunners and a single weak battalion, Shelton's, the Forty-fourth.

For two days Elphinstone struggled on helplessly, still trusting to promises of help and protection from the treacherous Afghans; but on the third day he refused longer to be cajoled, and the retreat began to assume a military form. The fighting men were by this time reduced to about three hundred men, weakened by hunger and cold, threading their weary way over steep passes and through dangerous defiles amid thousands of savage, bloodthirsty tribesmen. The advanced guard, though a mere handful of men, fought their way forward and halted; and the Afghans, always preferring an enemy's back to his face, threw all their strength upon the rear-guard. But here Shelton was in command, and Shelton would not be beaten. He likewise had but a handful of men; their ammunition was scanty, and the odds against them were terrific; but Shelton flew from group to group of his men, wherever the danger was greatest, and inspired them with strength and courage. The last stage of the march lay through a gorge three miles long, the sides of which were lined from end to end with Afghan marksmen, but Shelton carried his men through it by sheer moral force and at four

o'clock in the afternoon brought his rearguard, sadly thinned but triumphant, to its camping-ground.

The troops had been on foot since daybreak and had nothing to eat ; but a dangerous pass lay ahead, and Shelton urged that the retreat should be continued without delay. At seven o'clock on that same evening, therefore, the march was resumed, the main body of the Forty-fourth leading the way, a mob of three thousand followers coming next, and Shelton, as before, in charge of the rearguard. Twelve thousand soldiers and followers had perished in three days, so that the column was less encumbered than it had been. For seven miles it was unmolested ; then a few shots were fired which caused a panic among the followers and caused some delay, but it was not until daylight came that the Afghans gave real trouble, and for ten miles the conflict with them became incessant. At three o'clock the advanced party, having forced its passage into clear ground, halted, and turned about, cheering loudly while Shelton with indomitable energy fought his way forward, foot by foot, through the hordes of his pursuers, and once again brought in his rearguard triumphant.

There were now only two hundred men left, all alike exhausted by fatigue, hunger and thirst, and there were still thirty miles to be traversed before they could reach a safe refuge. Shelton was their one hope ; but Elphinstone had again renewed negotiations with the Afghans, who were shrewd enough to require that Shelton should be given to them together with Elphinstone himself as a hostage. There is no need to pursue the dismal story further. Shelton became a prisoner by the orders of his superior officer, and only one man of the two hundred escaped. But it is very evident that if Shelton had been in command of the retreating force from the first, he would have brought at least a part of it safely through the trial. Elphinstone in three days had carried it over a distance of only sixteen miles ; whereas, under the fiery impulse of Shelton, the men, though fighting incessantly, had traversed thirty miles in less than thirty-six hours. Never at a time of desperate peril did soldier do his duty more nobly than that cantankerous, one-armed Colonel.

His temper was not improved by being haled off as a prisoner when he longed only to stay with his men and save them or die with them. His demeanour to his fellow-captives was insufferable, and when he was at last released he found, on his return to India, that he was to be tried by court-martial and made the scapegoat for all the disasters which he had tried to avert. The trial was most

irregularly conducted, the charges against him being many of them quite pointless and the evidence admitted against him quite worthless ; but he was honourably acquitted and remained in command of the Forty-fourth. One day in his barrack-yard in Dublin his horse took fright. Shelton with his single arm was unable to control the animal, and he was violently thrown and killed by the fall. The story goes that his battalion thereupon turned out and gave three cheers ; and it may be true, for his temper had become fiendish. Yet nothing can dim the lustre of his behaviour during those thirty-six hours in the defile of the Khyber. He took over a mere handful of men, weary, hungry, frost-bitten and in the lowest depths of despair. Twelve thousand soldiers and followers had perished in the retreat, and the remnant, never doubting that they must share their fate, were listless, spiritless and hopeless. Then Shelton assumed command of them ; discipline revived at once ; and they became not only soldiers but heroes. If Elphinstone had not surrendered him to the Afghans, Shelton might possibly have carried a small remnant through all dangers, and his name would have been honoured in England to this day. Had the Victoria Cross existed in his day he would have entitled himself to it fifty times ; and it could hardly have been denied to him, for it was he who redeemed the character of the British soldier in that time of disgrace. But he is forgotten, or, if he be remembered, it is as the colonel whose battalion cheered the news of his death. Still if ever British soldier was a hero, it was Shelton.

THE FRENCH OFFICIAL ACCOUNT

THE TURN OF THE TIDE IN 1918*

THE first two volumes, Numbers 1 and 2 of Tome I of the French official narrative of the war, which took us up to the eve of the battle of the Marne, have been followed, not by the story of that battle, but by a volume of Tome VII, dealing with the operations of 1918. It has been compiled by another team of officers, headed by Lieut.-Colonel Laure, and is on an entirely different scale to its predecessors. Whereas Volume 2 of Tome I required 800 pages to deal with a period of eleven days, the 26th of August to the 5th of September, 1914, and far smaller forces, the new volume takes only 400 pages to place before us the events of the momentous period of ninety-seven days, the 18th of June to the 25th of September, 1918. There are two volumes of appendices and a case of maps.

We could well understand that the less said about the opening of the French campaign in August, 1914, the better for the reputations of the French leaders; but if the narrative of 1914 is a mere thread to hold a number of documents together, that of 1918, now before us, is so thin and incomplete as to be nearly incomprehensible, and there are far fewer explanatory documents: one important document printed at length in the appendices receives no mention in the text. In consequence the control of operations by Marshal Foch appears to be of the slightest kind and confined to verbiage. Of his ceaseless activity to spur on General Pétain and the commanders of the French Armies there is little trace. Whilst the 1914 story tends to the exaltation of Marshal Joffre, the 1918 one seems to endeavour to reduce the rôle of Marshal Foch. As we shall show, the part played by Field-Marshal Sir Douglas Haig in the strategy is acknowledged, although the hard fighting of his troops is somewhat lightly passed over. Possibly the share of Marshal Pétain and of his Chief of the Staff, the late General Buat, is made out to be greater than hitherto suspected.

* "*Les Armées Françaises dans la Grande Guerre. Tome VII. La Campagne Offensive de 1918 et la Marche au Rhin, 18 juillet, 1918—28 juin, 1919. Premier Volume, 18 juin—25 septembre, 1918.*" Paris: Imprimerie Nationale (200 francs).

We will now let the compilers have their say as to the design of the work. They write in the preface :

" Tome VII is devoted to the offensive campaign of 1918, from the 18th of July to the 11th of November, as far as concerns the rôles of the High Command of the Allied Armies, of the French High Command and the French troops on the Western and Italian Fronts. The operations of the other Allied Armies on these fronts are shortly noticed. In addition, the relation between the above operations and those which took place in the minor theatres—which will be dealt with in Tomes VIII and IX—are pointed out.

" The general account of the vast and complex subject treated of in these pages will enable the main lines of the operations to be comprehended, and will be found to justify the sub-divisions adopted. These are eight in number.

" The offensives carried out in order to disengage from the enemy, the plan of the operations of the 24th of July, and the preparation of the general offensive, are dealt with in the first four parts. The general offensive from the North Sea to the Meuse and to the Adriatic are studied in Parts 5, 6 and 7. The 8th Part is reserved for the Armistice of the 11th of November and for the Allied march to the Rhine."

Turning to the volume, we find the first part is concerned with the preparation of the renewal of the offensive by the Allied Armies on the Western Front during the period from the 14th of June to the 17th of July ; but it includes a chapter on the general situation on all fronts. The second part deals with the second battle of the Marne and the plan of operations of the 24th of July (18th of July–7th of August) ; the third with the third battle of Picardy and its extension north of the Somme (8th–29th of August), with chapters on the battle of Montdidier and the second battle of Noyon ; the fourth with the advance to the Hindenburg Line, the battle of St. Mihiel and the preparation of the general offensives. As a specimen of the narrative, we will translate the account of the 8th of August, 1918, noting that there is no allusion to Ludendorff's agonized confession that it was the " black day " of the German Army, or even the briefest account of the enemy's operations. It runs :

" The British Fourth Army attacked on the 8th of August at 4.20 a.m. without artillery preparation, but supported by a great mass of tanks. Completely surprised, the enemy gave way on the front of eighteen kilometres between the Ancre and the Luce. The Canadian Corps, which was in liaison with our troops, advanced very rapidly.

" On the right of the British Fourth Army, the French First Army was engaged. At the same time, at 4.20 a.m., on the whole front of the

latter the artillery opened violent fire : but the XXXI, IX, X and XXV Corps did not make any infantry attack at this moment.

"At 5.5 a.m. the XXXI Corps debouched suddenly from the Luce front. The enemy, who had been seriously in action with the British for nearly three-quarters of an hour, was visibly perturbed by this unexpected extension of the battle. He did not succeed in slowing down the advance of the 42nd and 37th Divisions north-east of Moreuil," etc.

There are two pages devoted to the extension of the French attack, which did not take place until later in the day. The corps on the right of the XXXI—the IX Corps—began its infantry advance at 8.20 a.m. ; the X and XXXV Corps "limited themselves to manifesting great artillery activity," and General Debeney directed them "not to attack until the morning of the 9th." The account concludes with the paragraph :

"The British Fourth Army made some progress between the Somme and Ancre, but it was south of the Somme that its gains were most marked : by the evening of the 8th the British advanced guards had reached Cerisy—Gailly—Morcourt—Harbonnières ; farther south, they had passed Caix and got as far as Le Quesnel. In this region the Canadian Corps effected an average advance of ten kilometres."

Little facts, as for instance that it was a foggy morning, and that Sir Douglas Haig was in command both of the French First Army and the British Fourth Army (under Sir Henry Rawlinson) are omitted.

The volume leaves no doubt that the successful battle of the 8th of August to relieve Amiens was suggested by Sir D. Haig. On the 12th of July, 1918, General Foch, in a letter printed at length, proposed to the British Commander-in-Chief that

"the first offensive to be launched on the British front should be the one starting from the front Festubert—Robecq, with a view to freeing the Bruay mines and forbidding the communication centre of Estaires. . . . This operation has already been indicated in my General Directive No. 3 of the 2nd of May [not printed]."

On the 17th of July Sir D. Haig replied saying that he saw "no advantage in an advance over the flat and marshy region between Robecq and Festubert" and continued—the French translation in the volume is re-translated into English here :

"The operation, in my opinion, which is of the highest importance and which I proposed to you, as before [there is no clue to a previous proposal], should be executed as soon as possible, is to push forward the Allied front to the east and south-east of Amiens so as to free that town

and the railway. The best way to carry out this object is to make a combined Franco-British operation, the French attacking south of Moreuil and the British north of the Luce.

"To realize this project, I am preparing plans secretly for an offensive north of the Luce, direction east. . . . In liaison with this operation north of the Luce, the French forces should, in my opinion, carry out an operation between Moreuil and Montdidier in the direction of Hangest."

General Foch concurred in this plan, and placed Sir D. Haig in charge of its execution.

Later, on the 14th of August, when General Foch directed that the French First Army and British Fourth Army should continue their frontal attacks, Sir D. Haig in a letter pointed out the difficulties, the strength of the enemy's defences and the unsuitableness of the ground for the employment of tanks, and stated that he had stopped further attacks until proper artillery preparation could be made. He suggested "we can arrange this action conjointly with the attack on the front of the Third Army, the preparation of which is being pushed on as rapidly as possible." Foch again gave way, and, as we know, on the 21st of August, the Third Army (Byng) striking south-south-eastward widened the battle front, and, on the 28th, the First Army (Horne) farther north joined in, and the German front before Debeney and Rawlinson fell back.

There is much correspondence with regard to the organization and employment of the American forces. The narrative of the St. Mihiel offensive covers only four pages. It begins :

"The artillery preparation commenced on the 12th, at 1 a.m. At 5 a.m. the principal attack was launched, that of the American I and IV Corps, in the general direction of Thiaucourt. The two corps advanced without encountering great resistance through the thick wire entanglements accumulated in this part of the front during the four years of stabilization. The enemy, it seemed, had only a small amount of artillery to defend his advanced positions, and withdrew his infantry step by step : he had, as we have seen, taken measures for the evacuation of the salient of St. Mihiel. The beginning of this retirement, in all probability, coincided with the launching of the offensive, and, upset by this, it soon degenerated into a precipitate retreat."

The volume in conclusion states :

"On the 25th of September, 1918, the operations on the Western Front had arrived at the point that the programme laid down by the Commander-in-Chief of the Allied Armies on the 24th of July had been completely executed . . . and orders were given and dispositions made for the Franco-American Armies to attack on the 26th, the British Armies, followed by the French First Army, on the 27th ; the Franco-Anglo-Belgian Army of Flanders on the 28th."

There are tables giving the prisoners and material captured, and the casualties in the various periods, but no general totals. Thus in the period 6th to 15th of August, 1918, the French First Army (Debeney) lost officers, killed, 86 ; wounded, 300 ; missing, 3 : other ranks : killed, 1784 ; wounded, 10,822 ; missing, 987.

The general impression left by the volume is that it is simply the elaboration of a report of the nature of a despatch, written at the time ; whilst the appendices seem to contain little more than the correspondence between the higher leaders.

There are some curious gaps in the appendices : for instance, there are no documents from the 27th of June to the 4th of July ; and those printed are not always arranged in proper order ; *e.g.* an important letter of Sir D. Haig is placed two pages after General Foch's reply to it. Some documents refer to earlier correspondence which is neither given, nor is any explanation offered of its nature or where it is to be found ; *e.g.* General Foch's letter to Sir D. Haig dated the 12th of July refers to Directive No. 4 of the 1st of July, a letter of the 7th of July and Directive No. 3 of the 23rd of May, without the contents of these important papers being provided. This is one of the inconveniences that may easily arise by not issuing the volumes of the history in chronological order, for doubtless these missing documents will be found in an earlier (but so far unpublished) volume.

A GREATER THAN SCIPIO AFRICANUS?

BY COLONEL J. F. C. FULLER

GREATNESS, and more particularly the greatness of great men, is to a very large extent conditional, depending as it does on culture and the tone of civilization, on goings and comings, and the ceaseless vibrations of thought and things in the never-ending chain of life. It is human changefulness which makes history so difficult to understand. It is easy to collect facts, and though it is difficult to sort the grain of historical happenings from the chaff and dust of succeeding ages, what is more difficult, most difficult, all but impossible, is to perceive this grain as it was seen when in the ear. Can we really think and feel as thought and felt an ancient Greek or Roman?

This is the true difficulty of historical study: comparisons are easy, but to be true they must be related conditionally. What were the conditions which enwrapped and swaddled the greatness of an historical event, or of an historical character? For instance, can we say that Homer was a greater poet than Shakespeare, or that Shakespeare was greater than Goethe? What I think we can do, at least to our own private satisfaction, is to select from an age the hero of our choice, and say: this is the great man—the supreme poet, the supreme artist, the supreme soldier of his day. Yet even to do this, we must have read much, and thought more, else we are apt to catch hold of the wrong coat-tails. But to bring two coat owners together, one wearing a toga and the other the Marengo ulster, and to compare the genius, the greatness, the divine spark, the heroism which glowed, flamed, and scintillated in the living Scipio and Napoleon, is to say the least a daring task. Yet it has been done, and done well; * not that I have been convinced by it, or that I have been persuaded to push Napoleon into the dust-bin of shattered reputations. But that a student of things military has rescued from the ash heap of war a well-known yet little appreciated

* See "A Greater than Napoleon—Scipio Africanus." By Captain B. H. Liddell-Hart.

soldier is a good work, and not one to be belittled. I thank him, for, as effect follows cause, so must Agathocles, an all but forgotten warrior, follow on the footsteps of Scipio, though historically he preceded him, and because he did precede him, and, because he started upon his great adventure on the top of a most crushing defeat, his greatness appears to me all the more extraordinary. Bearing conditions in mind, I will now turn to his story, leaving it to the reader to decide whether in many respects Agathocles was not a greater soldier than Scipio. It is for this reason I have put a note of interrogation after my title.

Agathocles was born in 361 B.C., and was seventy-two years old when he died, and though not a contemporary of Scipio's (B.C. 235-183), chronologically he was close enough to him, I think, to warrant contrast if not comparison. His father was a humble potter, a Rhegine exile, who brought him, a refugee, to Syracuse when he was about eighteen years of age. He had no friendly Polybius or Livy to write up his history, for though Polybius mentions him kindly he tells us next to nothing about him. Only the "snippetty" Justin and the prosy, moralizing Diodorus bear any considerable witness to his career. Yet in his day, as a soldier he seems to have outshone all his compeers, for Scipio himself on being asked "whom he considered to have been the most skilful administrators and the most distinguished for boldness combined with prudence," answered: "The Sicilians Agathocles and Dionysius." Was it not also this same general, the conqueror of Hannibal, who, when confronted in the Senate by Quintus Fabius, turned on him and said: "Why, therefore, since you have leisure to relate Grecian tales, do you not rather set before us the instance of Agathocles, King of Syracuse, who, when Sicily was for a long time wasted by a Punic war, by passing over into this same Africa, removed the war to the country from whence it came?"

As a young man Agathocles was addicted to every vice, he was rapacious and notorious for his profligacy, and was quite oblivious to such virtues as truthfulness and honesty. A skilful and winning liar, a consummate actor with a witty and persuasive tongue, he no doubt thrived and waxed strong amongst the *canaille* of the purlieus of Syracuse, then the New York of the Mediterranean. Being handsome, athletic and of powerful build he attracted the notice of a nobleman called Demas, who supplied him liberally with everything he required. He made him a colonel in the Agrigentine militia, in which he distinguished himself by wearing armour and carrying weapons which none of his soldiers could bear or wield. Later on, he

became a military tribune, and his fame spread throughout the country, for, as Diodorus writes : " he was eager to fight, daring in action, and bold, nay, impudent in his harangues to the people." Presently Demas fell sick and died in 333 B.C., and personally I cannot but suspect Agathocles, for with little delay he married his widow, and became one of the richest citizens in Syracuse.

At this time the democracy founded a short while before by the great Timoleon, had crumbled away, and had been replaced by an oligarchy the two chief leaders of which were Sosistratus and Heracleides. This oligarchy dispatched to the Italian coast an expedition to assist the Crotonians against the Bruttians. It was commanded by Antander, a brother of Agathocles, who served as a subordinate leader. In the campaign which followed he greatly distinguished himself, and though he won the first prize for valour, Sosistratus, through jealousy, withheld it from him. This so much incensed Agathocles that he accused Sosistratus of aspiring to a despotism, but failing to raise the people he was forced to fly as a refugee to Italy.

Once conditions had changed he returned to Syracuse to find that the people had elected a Corinthian called Acestorides as their general, hoping to find in him a second Timoleon. Acestorides, suspecting that Agathocles was about to establish a tyranny, decided to put him out of the way, but, being afraid that a disturbance might follow should his assassination take place in Syracuse, he ordered him to leave the city. Then he posted a party outside the walls to waylay and kill him. The would-be tyrant was, however, far too shrewd to fall into this trap. Though audacious in the extreme, as we shall presently see, he never took unnecessary risks. He himself left Syracuse at night, but, before his departure, he persuaded a young man who closely resembled him to personate him. He handed over to this unfortunate youth his horse, arms and garments, and then disguised himself as a beggar. That night the pseudo-Agathocles left the city and was at once murdered, whilst the real one slunk out safely and with every intention of returning ; for though an outlaw and a beggar, he had made up his mind to become King of Syracuse.

Another change in the Government now took place. Acestorides was dismissed, apparently in 317 B.C. Be this as it may, shortly after the flight of Agathocles we find Sosistratus back in Syracuse, and peace established with Hamilcar, the Carthaginian leader. This peace was undoubtedly unpopular, and Agathocles, who had meanwhile raised another army, grew so powerful that he was called

in to act as mediator between the discordant parties within the city. Now came his chance. To show his good faith, he first proceeded to the temple of Ceres, and with both hands on the statue of the Goddess he swore by the most solemn oaths to behave as a good citizen and to support the existing Government. He did this with such a show of sincerity that every one believed him. Next he concerted with Hamilcar to seize the supreme power and persuaded him to reinforce his Army with African troops. This done, a revolution at Erbita gave him the excuse still further to strengthen his forces, which he did by enlisting in his Army the most desperate ruffians he could find. Having behaved in a most exemplary way, a few days later he mustered his troops, now 3,000 strong, outside the chapel of Timoleon where the Senate was sitting, and with a small party entered the building to transact the normal business of the day. No sooner had he crossed the threshold than he turned upon those assembled and accused them of plotting his death. He acted the part of offended innocence with such consummate skill that his men shouted that justice should be done. Having by his eloquence worked his soldiers up to boiling point, he suddenly turned to a trumpeter and ordered him to sound the charge. The assembly was slaughtered, and the soldiers, mad with fury, broke their ranks, and rushing through the streets of Syracuse filled the whole city with horror and confusion. Though his men were demented with rage, not for a moment did Agathocles lose his head. This time he intended to make a clean sweep of his opponents. He ordered all the gates of the city to be closed, and did not attempt to stay the slaughter until 4,000 of the citizens had been assassinated. This done he thrust 6,000 more of them out of Syracuse as exiles.

Thus far his actions were those of the normal tyrant—slaughter and pillage. He knew full well the value of fear as a rod, but Agathocles was no normal despot, he was a genius, a consummate rogue, yet one lit by that divine spark. He realized that, if he was to enjoy his despotism, the people must be for him and not against him. Therefore he called together an assembly of the people, still cowed and terror-stricken by the recent massacre, and declared “that he would purge the city of all who affected a monarchy, and restore the people to perfect liberty; and that he would henceforth stand upon equal ground with them all, and live a private life, free from further cares and toils.” Having spoken, he threw away his general’s coat and putting on a common jacket went out and joined the crowd.

He knew perfectly well what would happen. His followers

would be terrified at the loss of his leadership, for they had created numerous enemies, and the people would be equally terrified, for without his controlling hand there was no security to be hoped for in the city. So it happened, for they one and all besought him to take upon himself the entire and absolute management of affairs.

Once in authority he abstained from all guards and ceremonial attendants, and refused to wear a diadem. The elder Dionysius, his great predecessor, had, when at the summit of his power, been so fearful of treachery that he refused to be shaved or have his hair cut. Agathocles was too great a man, and far too astute, to be fascinated by crowns or a retinue of courtiers. He was of the people and not of the aristocracy, and he knew that if he had the *canaille* on his side their affection was his greatest protection. He, therefore, at once decreed that law and order would be strictly maintained in Syracuse; this won over the remnants of the *bourgeoisie*. He then promised to the poorer citizens the abolition of their debts, and also a new distribution of lands, and so won them over that he was freed from all internal troubles, and was able greatly to strengthen his naval and military forces and to build extensive arsenals in Syracuse.

Becoming fearful of the growing power of Agathocles, the subject cities of Syracuse called in the Carthaginian Hamilcar, and a peace was patched up, the terms of which were exceedingly favourable to the tyrant. Nevertheless, scarcely was the ink of this treaty dry, than Agathocles sent a force to Messene, which city being utterly surprised by so sudden a *volte face*, surrendered at call, and delivered over to him 600 of its citizens who had opposed him; these he at once put to death.

Messene off his hands, there still remained the hostile cities of Agrigentum and Gela. The former he besieged, but had to abandon this work on the approach of a powerful Carthaginian fleet of 60 sail, soon to be followed by another consisting of 130 war ships and numerous transports. He thereupon retired to Ecnomus in the territory of Gela, where he assembled his Army.

It was now the hottest season of the year, and for a time both Armies, Carthaginian and Greek, remained stationary in their camps. The former was entrenched on the hill of Ecnomus, and the latter by a castle built by Phalaris, the tyrant who was wont to sacrifice his enemies in the red-hot belly of a brazen bull. The account of the battle which was fought, known as the battle of Himera, is dealt with by Diodorus in his usual unmilitary way. Apparently what happened was as follows: Agathocles was largely outnumbered by Hamilcar, who had under his command 40,000 infantry and 5,000

cavalry. His plan was to beat the Carthaginians in detail, and to strike his decisive blow when it would be least expected. By the castle of Phalaris, he drew up a number of baggage wagons as a bait, and, a little later on, began to withdraw them as if he intended to retire. This was too tempting an opportunity for his enemy, who sent out a strong detachment to seize the wagons. Agathocles, having foreseen what might happen, had posted an ambush, which now fell upon the Carthaginians and threw them into great disorder. Knowing that the fugitives would disorganize the main force, in the enemy's camp, Agathocles at once put himself at the head of his decisive attack and stormed the hostile trenches. This assault was eminently successful, as Hamilcar had not sufficient time to form battle order, but, fortunately for him, he had at his disposal 1,000 Balearic slingers, who made such effective use of their missiles that they drove back the attack. Slowly withdrawing his troops, Agathocles forced the camp in several other places, and was on the point of winning a decisive victory when a Carthaginian Fleet appeared on the horizon, made rapidly for the shore, and landed a considerable force of men in rear of the Greek front. Agathocles was now completely hemmed in, and his whole force, seized with panic, broke and fled, no less than 7,000 being slaughtered. His defeat was complete. He himself with the remnants of his cavalry retired to Gela, in order to divert Hamilcar from Syracuse until the people there could gather in their crops; for he saw that this city would be besieged. Having gained time for this to be effected, he withdrew to Syracuse, and at once ordered its walls to be strengthened.

Hamilcar, who appears to have been an able commander, in place of besieging Gela lost no time in blockading the harbour of Syracuse so that all incoming supplies might be cut off. Then, by considerate behaviour, he won over all the subject cities. This diplomatic attack daily rendered the position of Agathocles more desperate. The defection of his subject cities rapidly reacted on the people of Syracuse, who grew rebellious. The tyrant had in the battle of Himera lost practically all his infantry, and was at the time barely maintaining himself in the city with the remnants of his cavalry brigades. The command of the sea was absolutely in the hands of the Carthaginians. What could he do?

What did he do? He determined to transfer the war to Africa! He determined to save Syracuse by attacking Carthage! Well may Grote write: "No Greek, so far as we know, had ever conceived the like scheme before; no one certainly had ever executed it. In the memory of man, the African territory of Carthage had never

been visited by hostile foot. It was known that the Carthaginians would be not only unprepared to meet an attack at home, but unable to imagine it as practicable." It was because of this that the genius of Agathocles, monster though he was, shines so brightly.

For a moment I will turn to Scipio and his masterstroke, for here is presented to us a legitimate historical comparison.

When Scipio decided to strike at Carthage, Hannibal had been fighting in Italy for fourteen years. During this long and eventful period he had taught the Romans how to fight. He had transformed their Army from a militia into a highly trained, professional force. The command of the sea was in Roman hands. Scipio himself had but recently returned from Spain, where he had won victory after victory. Though he had many jealous enemies in the Senate, the people were behind him. Sicily offered him a secure base of operations, and the expedition of Lælius, who landed at Hippo Regius a year before he himself crossed the seas, supplied him with most valuable advanced reconnaissance. In Africa Masinissa was his friend, an ally who could furnish him with the best cavalry of the day—an arm which he knew to be essential. He had over a year wherein to train and to equip his force. His Army was not all that he desired, but he had with him two veteran legions, the 5th and 6th, which were itching to square their defeat at Cannæ. To cross over to Africa he had at his disposal 40 warships and 400 transports capable of carrying some 16,000 infantry and 1,600 cavalry.

Now turn to Agathocles. He had just suffered a crushing defeat. He was closely blockaded in Syracuse, which was bulging with revolt. His object was to hold Syracuse, and his scheme for doing so was an invasion of Africa in order to draw the enemy out of Sicily. He must leave a strong garrison in the city, and he could not invade Africa without an army. His treasury was bankrupt, and the few men whom he had saved from the rout of Himera were mercenaries who served only for pay. He had but few ships, and no possibility of gaining command of the sea. What could he do?

What did he do? First, he secured his home base in a most effective manner. He divided kindred and relations one from another, especially brothers from brothers, and parents from children. "One lot he forceably enrolled in his army, and the other he left in Syracuse. Thus his army itself became a hostage for the good behaviour of his base." Secondly, he rid himself of the more wealthy people who were strongly opposed to him, and in an equally effective way. "He told them, that he indeed was inured to hardships, could easily endure the miseries of a siege; but that he should

greatly pity the citizens if they should be blocked up and forced to undergo the like. Therefore he ordered those who were not willing to suffer what might be their fortune and lot, to provide for the safety of themselves and their estates." Most of those to whom he gave this advice took the hint, and left the city. But he foresaw that they might return in his absence, and so he sent out a party of mercenaries who cut their throats. Then he confiscated their estates for the benefit of the public, and, in order to damp down popular indignation, he at once manumitted all the slaves and servants in Syracuse, which gave such of their masters as were still alive a full day's work to keep them quiet. Thirdly, requiring more money, "he took the estates of infants out of the hands of their guardians; declaring that he would have a far greater care of them than they had, and be more faithful in giving them an account, and making restitution when they came of full age." He also borrowed from the merchants, pillaged the temples, "and took the jewels and ornaments from the women's backs."

His next move was to make his brother Antander governor of the city, and he handed him over a respectable garrison. Then he collected together sixty ships, but he could obtain no horse transports, and as he knew well that cavalry was the decisive arm, "he commanded the horsemen, that besides arms, they should every one carry along with him a saddle and bridle," and catch their mounts when they landed! He told no one where he was going, but spread reports that he intended sailing to Italy. Whether any one believed him seems doubtful.

The problem now before Agathocles was how to get out of Syracuse. It was not a question of gaining command of the sea—this was impossible—but of persuading the Carthaginian Fleet to sail out of the harbour for about half an hour. If this could be effected, the open seas could be gained. Agathocles must have spent some anxious moments thinking out his plan. He knew (or quite possibly he had arranged this matter) that some corn-ships were due to arrive at Syracuse on a certain day. If these ships were to sail towards the harbour, and then, on nearing it, to tack about and make off as if running away, the Carthaginians might be inveigled into a pursuit. Even if only part of their Fleet took up the chase, he might be strong enough to break through the remainder.

It happened much as he had planned, for on the arrival of the corn-ships, the whole of the Carthaginian Fleet left the harbour, and, when it was well out to sea, Agathocles with all speed slipped

out. Once in open water, the Carthaginians, supposing that his intention was to rescue the transports, turned about and cleared their decks. To their surprise, in place of sailing towards them, he stood out to sea as fast as he could. Then began one of the most exciting chases in naval history, and, whilst it was in progress, the corn-ships, once again tacking about, made Syracuse in safety, much to the relief of Antander, for the city was short of corn.

Having sailed for six days and six nights, early in the morning the Carthaginians caught them up. . . . "And now Africa was in view, when all the sailors and rowers called out earnestly one to another to exert themselves, so that the strife and pains to get to land were incredible." As the shore was neared, so close were the leading Carthaginian ships, that darts were hurled against the Greeks. Thereupon Agathocles tacked about, drove back his foremost pursuers on to their main Fleet, and then ran his ships ashore, his men leaping on to the beach "as if they had been contending for the mastership at the gymnastic games."

When the news of his landing was received in Carthage the city was thrown into a turmoil, for no one could believe that Agathocles would dare to leave Syracuse before destroying the Carthaginian forces in Sicily. The Senate of Carthage determined, however, to give battle, and an army of 40,000 infantry, 1,000 cavalry and 2,000 war chariots was raised, the command of it being handed over to two generals, Hanno and Bomilcar. To these were handed over 20,000 pairs of handcuffs for their anticipated prisoners.

Once ready, the Carthaginian Army marched to meet Agathocles. Bomilcar commanded the left, which, on account of the ground was ranged in great depth. Hanno commanded the right, and with him was the Carthaginian Sacred Band of 2,500 distinguished citizens. Agathocles, having carefully examined the Carthaginian order of battle, drew up 2,500 foot on the right of his line under his son Archagathus. "Then he drew up about 3,500 Syracusans; next to them 3,000 mercenaries out of Greece; and lastly, 3,000 Samnites, Tyrrhenians and Celtæ. He himself with the troops of the household and 1,000 heavy-armed men, commanded the left wing, opposite to the Carthaginian Sacred Band. The archers and slingers, to the number of 500, he mixed here and there in the two wings." Then he discovered that many of his soldiers were unarmed; this in no way disconcerted him, for "when he saw some of those that were naked, and without arms, he took the covers and cases of the shields, and so delivered them to the unarmed; however in truth useless, yet so contrived by him, to the end that those who

were at a distance (and knew nothing of the stratagem) should look upon them to be armed men."

He had realized some time before he marshalled his men, that many of them had never fought before, and that the most likely thing that would happen was that half of them would bolt before coming into javelin-throw of the vastly superior Carthaginian Army, and that the other half would then follow suit. So he secretly collected a number of owls, and then, as his men were parading, he loosed them out from the camp. The result was that the birds flew "up and down through the army," and, blinded by the morning sun, settled on the men's shields and helmets. A wild enthusiasm now seized upon the soldiers, and from a rabble of fearful men, in a few seconds they were changed into bloodthirsty warriors itching for the fight, for one and all were convinced that Minerva, the Goddess of War, was in their midst, and would lead them to victory. Scipio was a wonderful leader, yet, so I think, the palm of leadership must be handed to Agathocles.

The battle was opened by a charge of the Carthaginian chariots and horse, but Agathocles' men were so staunch that, though many were pierced through with darts and arrows, they drove the chariots back into the midst of their own foot. Hanno next charged the Greek left wing, and after a desperate engagement was killed with many of the Sacred Band. His death seems to have convinced the Greeks that the War Goddess was leading them, for their courage grew fanatical, with the result that Bomilcar, whose ultimate idea was to establish a tyranny over Carthage, faced about and began to retire. At once Agathocles launched his decisive attack, and soon converted the retirement into a rout, the fugitives seeking refuge in Carthage, which city Agathocles at once besieged.

Withdrawing from Carthage, the tyrant seized Neapolis, and lay siege to Adrumetum. The Carthaginians, learning of this, raised a new army and attacked his base depôt at Tunis, drove the garrison out of its camp, and then began to batter down the walls of the city. Apparently Agathocles considered that the capture of Adrumetum was of vital importance, and equally vital was it for him to re-establish himself at Tunis, for all the plunder of his mercenary troops was hoarded there. He had not sufficient men to carry out both operations, yet he determined to accomplish both by means of a ruse. One dark night at the head of a small body of men he marched out secretly to a hill which lay halfway between Adrumetum and Tunis, and there kindled a large number of fires. The result of this was that the Adrumetines were terror struck, and so equally were the

Carthaginians at Tunis ; the first thought a large army had landed to reinforce the besiegers, and the second that Agathocles had raised the siege of Adrumetum and was marching on Tunis. The terror of Agathocles was now so great that Adrumetum opened its gates, and the Carthaginians who had laid siege to Tunis forthwith abandoned the operations and retired. I do not think that even the great Scipio ever so effectively killed two birds with one hollow stone.

Having, at practically no loss, captured Adrumetum and secured his garrison at Tunis, Agathocles moved southward and stormed Thapsus. Whilst thus occupied, once again did the Carthaginians lay siege to Tunis. Agathocles hearing of this, without a moment's delay set out by forced marches to relieve it. Approaching the Carthaginian camp during the night, he ordered his men to light no fires ; and then at dawn, when the enemy's foragers, quite oblivious of his presence, went out to pillage the countryside, he fell upon them, killing 2,000 and capturing many prisoners. This sudden and unexpected attack greatly raised his prestige, and augmented the terror of his name, for the Carthaginians had been strongly reinforced from Sicily, and also by the Libyan King, Elymas, who was slain in this battle.

Whilst the Carthaginians were bewailing their fate, one of those curious and unexpected events occurred which all but delivered their enemy into their hands. Whilst at supper one night, Lyciscus, one of Agathocles' colonels, heated with wine, began to rail against him, and though the tyrant passed the abuse off with a jest, his son Archagathus was so much enraged that he seized a spear and killed Lyciscus. Being a popular officer, the camp was thrown into a tumult ; arms were seized and a resolve was made to put Archagathus to death, and that, if Agathocles did not deliver him up, he should die in his stead. The mutineers then seized Agathocles and his son and placed them under a guard. This was bad enough, but what was worse was that for some time the mercenaries had received no pay, and the Carthaginians, hearing of the mutiny, sent over a party of men who promised to pay all arrears, and also a large reward if the officers would bring over the troops.

Agathocles was in chains, he was bereft of all power save his wits, and once again he made good use of them. He asked to be released, then he laid aside his purple robe and put on "a poor country-fellow's habit," and humbly came out in the midst of his soldiers. At the sight of him there was a deep silence, and his men gathered round him. Then he spoke to them telling them what he had done

and that he was prepared to die, and to prove that he was no coward he drew his sword and was about to run himself through when his men with one accord cried aloud to him to forbear, and "all gave their voices generally that he should be set free and should again command them." Agathocles then began to weep, but nevertheless revested himself in his purple.

Once released, Agathocles did not intend to lose the advantage of the occasion. He knew how fickle a crowd always is, and probably he had learnt that the Cathaginians were expecting his Army to desert. So without losing a moment he assembled his men, rapidly marched on the Carthaginian camp, sounded the charge, and stormed it at the first assault, putting to the sword a large number of the enemy.

Seldom has a general been in more desperate a predicament. Once Scipio had to face a mutinous army. He displayed great tact in dealing with the situation, but compared with the mutiny against which Agathocles had to contend, his was a mere bagatelle. Had he been in chains in Carthage, in place of at the head of a large force of loyal troops, I doubt much whether he would have ever become the conqueror of Spain, or have lived to earn the title of Africanus.

Having now become master of Northern Africa, with the exception of the city of Carthage, he built some open skiffs, rowed with fifty oars apiece, and putting on board 2000 men he sailed for Sicily, leaving his son Archagathus in command of his Army. Landing at Selinus he subdued Heracleia, Therma and Cephaloidion, and then marched to Syracuse, having been absent from the city for more than two years. The city was still blockaded by the Carthaginian Fleet. His first problem was to raise the blockade, and whilst he was negotiating for ships with the Tyrrhenian ports in Italy, the Syracusan exile Deinocrates raised a powerful force of 20,000 foot and 1,500 horse, and several times offered him battle, which he judiciously refused. At length having obtained a number of Tyrrhenian war ships he defeated the Carthaginians in a sea fight, raised the blockade of Syracuse, and revictualled the city. This great success he celebrated at a banquet, and "when he had found out by the craft of his carousing and festival jollity who were his enemies, he invited them another time by themselves, together with 500 other Syracusans, who were men of brave and undaunted spirits; and when they were together, he surrounded them with his mercenary soldiers, and murdered them every man; for he was terribly afraid lest, when he was gone into

Africa, they should recall Deinocrates and the refugees, and abrogate his government."

When Agathocles returned to Africa he found that his Army had been considerably reduced, and that it now consisted of only 12,000 infantry, 1,500 cavalry and 6,000 Libyan carriages, not counting a large body of Libyan allies in whom he could place little trust. His position was a desperate one, for whilst he was in Sicily, the Carthaginians had recovered their courage, and had raised an Army of 30,000 strong. They had established themselves in a strongly entrenched camp in the vicinity, and refused battle, trusting to starve their enemy out by cutting off his foragers. Agathocles attempted to storm their camp, but failed, being driven back to his own with great slaughter.

The next night an unexpected disaster fell upon both Armies. The Carthaginians, overjoyed at having driven their enemy back, were sacrificing at the stake their most eminent prisoners, when the wind suddenly carried the flames which enwrapped the victims, against some neighbouring tents, and presently the whole camp was set on fire. Simultaneously, 5,000 of Agathocles' Libyan allies deserted, and were mistaken by the Carthaginians for the whole of the Grecian Army advancing to attack them. A panic then followed in which 5,000 Carthaginians perished. The deserters, after pillaging the camp (the owners of which had fled, fighting amongst themselves, towards Carthage), thought better to return. In the dark they were mistaken for Carthaginians, and when intelligence of their approach was brought to Agathocles, he forthwith poured his soldiers out of his camp and slaughtered 4,000 of them, thinking the burning camp a ruse to cover their approach. "And in this manner both armies deceived by the vanity of war fell into miserable disaster."

His position in Tunis now became untenable, and having no ships to transport his troops to Sicily, he resolved to embark on a skiff with his younger son, Heracleides, and to abandon Archagathus and his Army to their fate—this happened in 306 B.C. Archagathus, hearing of this, informed the leading officers, who seized Agathocles as he was attempting to slip away, and put him in chains. A tumult then broke out in the camp, and a panic followed, since, if Agathocles were killed, the men realized that they would be without a leader. Apparently in order to quell their fears, they thinking him dead, Agathocles in his chains was produced. Once again he acted the part of injured innocence, and aroused the pity of his troops, who freed him. Whilst the soldiers were shouting with joy, Agathocles seized upon this psychological moment to slip down to the shore,

embark in his skiff, and make for Sicily. When his desertion was discovered, the soldiers turned on Archagathus and Heracleides and slew them. Leaderless, the Army capitulated to the Carthaginians.

Once again in his remarkable career was Agathocles down, but not yet out. He landed near Egesta and sent to Syracuse for soldiers, but he was pressed for money wherewith to pay them, so on their arrival he entered the city, removed those who were poor and cut their throats, and then seized the rich and by torture forced them to hand over their money. A little later on, hearing that his sons had been killed in Africa, he ordered his brother, Antander, to massacre all the relatives of those whom he had originally pressed into his expedition. Thus, by establishing a reign of terror, was he able to hold his own until he could recruit more troops.

He managed to establish himself firmly in Syracuse, and soon regained dominion over the greater part of Sicily. Not much is known of the remaining years of his life, except that he plundered the Liparæan isles, undertook with success operations against the Lucanians, cooperated with Demetrius Poliorcetes in his attack on Corcyra, occupied Croton and Hipponia in Italy, married his daughter Lanassa to Pyrrhus, King of Epirus, and at the age of seventy-two, still full of vigour and audacity, planned another expedition against Carthage, possessing then 200 of the largest ships of war. But this invasion was destined never to take place, for, before the ships could be assembled, the tyrant met his end in a manner which toned well with his extraordinary life.

He had a beautiful captive, one Menon, an Egestan, who, because of the ruin which the despot had wrought in Egesta, bore him a secret hatred. As it was the tyrant's custom after supper to pick his teeth with a quill, one evening he called to Menon for his "tooth-picker," and he, dipping it in poison, delivered it to him. Agathocles, never suspecting anything, "plied all his teeth with that care and earnestness that none of his gums escaped the touch of the poison. . . . Then an incurable putrefaction and rottenness covered his gums and teeth." Whereupon, so the story goes (which is probably a pious invention), he was hurried to the funeral pile, and burnt whilst still alive.

To conclude this amazing history with a detailed comparison of the military greatness of Agathocles and Scipio is not my intention. In place I will, as concisely as I can, attempt to put the great Roman in his true strategical niche, and then examine what Agathocles has to teach us,

In no way do I wish to belittle the genius of Scipio, but in my opinion the greatness of Rome was not of his making ; rather was it he who set a coping stone upon the works of others, many of whom, before he was born, had toiled at laying the foundations of Rome's eventual world power. These foundations were definitely dug, lain and cemented during the First Punic War.

From the battle of Cannæ, 216 B.C., Hannibal's grand strategy entered on its decline, as did Napoleon's after Jena, in spite of its rosy complexion. From Cannæ onwards Hannibal's communications became more and more precarious and his political influence declined. Rome now struck at Spain, the stomach of Hannibal's Army, not at its heart in Carthage. Why a direct blow was not delivered against the Punic capital, as had been done in the days of Regulus, and before him by Agathocles, is hard to understand, seeing that Rome had raised some 200,000 soldiers and her Fleet ruled the seas. In Spain, Publius and Gnæus Scipio set to work ; then, in 211 B.C., disaster fell on their arms. This disaster brought into the limelight the great Scipio, son of the one and nephew of the other.

In the year 209 B.C., Scipio went to Spain. He should have gone to Carthage, as his great predecessor Agathocles had done, but he was a political general and not an autocrat, and therefore we cannot blame him for this lack of strategical perception, which goes to show how difficult it is to make comparisons. He took Carthago Nova, but failed to prevent Hasdrubal Barca from marching into Italy, and this in spite of Roman command of the sea. In 207 B.C., on the banks of the Metaurus, Hasdrubal's Army was totally routed by Claudius Nero and Marcus Livius. This battle was Hannibal's Leipzig, for it decided the war in Italy, more so, in my opinion, than Scipio's subjection of Spain, which virtually was completed the following year. With Hasdrubal to reinforce him, Hannibal might still have won his Montmirail, Champ Aubert and Montereau ; but his Waterloo was now in sight, and had he not met it in Africa, as he did, in 202 B.C., at the hands of Scipio and Masinissa—the Wellington and Blücher of the period—he must eventually have met it in Italy—Zama is but a name.

Scipio's success was due to many causes which lay outside his genius ; for it must not be forgotten that, whilst for years others had been toiling in the trough of the wave, he sprang into fame upon its crest ; date of birth was his ally as well as his remarkable ability. I will now turn to Agathocles, and see what we can learn from him.

He was not a young man when he first embarked for Africa, being then fifty-two years of age, which, I think, makes his exploits

all the more remarkable. Monster though he was, certainly if viewed through present-day spectacles, we must not let this prejudice our minds against him. The true object of a war is certainly to aim at the establishment of a better form of peacefulness, but the word "better" is conditioned by the events of the day to which it is referred. What is good to-day need not necessarily have been so two thousand years ago. The law of economy of force winds its tortuous way through conditions, and conditions tone objects; so much so that though to-day mutual destruction by civilised nations is, I feel, outworn, the best peace Agathocles could have gained would have been one in which Carthage was wiped off the map. The prosperity of Syracuse depended on Greek and Italian markets far more so than on Carthaginian, and the Carthaginian Fleet crippled Syracusan trade. It was a limited peace of this nature which he set out to attain, for utterly to destroy Carthage was beyond his power.

Grote, in summing up the generalship of Agathocles, complains that he worked without a "predetermined general plan." With this opinion I disagree, for to me it seems that he had a very definite plan, namely, to hold Syracuse as long as he lived; and that he held the city for thirty-two years, in my mind, goes a long way to prove that in the circumstances his plan was a sound one. In his African campaign it is certainly difficult to follow a clear-cut strategical idea, and this is due to two causes: first, Diodorus is not a military writer; secondly, through paucity of means the Syracusan has so to twist and turn his plan, that in order to meet and gain the better of adverse conditions the thread of it is often lost. Yet we can discover in his adventures that his grand strategy was very similar to Hannibal's. He aimed at destroying Carthage by cutting off her allies and subject peoples, for he did not possess the means of taking the city by assault.

To accomplish this end, he had first to secure his home base—Syracuse. He did so by establishing a reign of terror in the city, and, in spite of his four to five years' absence in Africa, he succeeded in holding the city to himself. Yet there was more in his strategy than terrorism, otherwise he would never have been able to walk about without a guard, as he did, and in complete security. His terrorism fulfilled its purpose, it did establish law and order, it was in fact creative and not merely destructive.

The reason for this was that he was exceedingly human as well as amazingly inhuman; most of his slaughterings would seem to have been accepted as normal events, all save the torturing of men,

and particularly of women, in Egesta. Torturing was un-Greek, and this crime eventually brought him to his end.

From Agathocles we learn this great lesson, one of the greatest in war. An army may be wonderfully disciplined, perfectly organized and superbly equipped, but all these things lack tone and solidity if its leader is not a student of human nature, a judge of character, and a master of circumstances.

Both Scipio and Agathocles can teach us much by contrast, and this, so it seems to me, is more profitable than comparison. Scipio, the aristocrat, can teach us how to fight wars of one category—clean wars ; Agathocles, man of the people, another—unclean ones. Scipio can teach us how we should fight Frenchmen, Germans and such like ; Agathocles can teach us what we may expect if we are ever called upon to measure ourselves against Mongols, Afghans and Russians led by a genius. Scipio teaches us that a great general should aim at making it a rule never to be defeated ; and Agathocles that, when the exception of this rule occurs, though we cannot fail to realize that we are down, we must never consider ourselves as knocked out. To be defeated is the ill-fortune of many, but to see in every defeat a road to victory, that is never to be counted out, is, in war, of all rare qualities the most precious. The Tyrant of Syracuse possessed this attribute, so it seems to me that he too must take his place among the Olympians, who, having each won the summit of fame as it was in his day, can afford to smile upon all comparisons.

THE YOUNG NAPOLEON'S SPY

By F. J. HUDLESTON, C.B.E.

THE more books I read about the American Civil War the more sorry I feel for General George Brinton McClellan, or the Young Napoleon as the papers nicknamed him when he was called from West Virginia to lick into shape and to lead the raw troops who had been blooded at Bull Run. Born in the Quaker City in 1826, he spent as a lad two years in the University of Pennsylvania and passed out of West Point second on the list, although the youngest, in a batch of sixty. He fought as a sapper in the Mexican War, and returned to West Point as an instructor in military engineering and was a member of the Military Commission sent out to the Crimea to report upon a war which, though remarkable for amazing feats of gallantry and stupidity, was not exactly brimming over with examples as to how victories were to be won. The report by young Captain McClellan, of the First United States Cavalry, issued as a Senate Document in 1857, is of great interest. For in his opening pages, with all the confident assurance of youth, he condemns the Allies for committing exactly the same mistakes which he was destined later on to make himself. He blames them, and rightly in the opinion of most authorities, for their dilatoriness after the Alma, but was there ever a general in the Civil War more dilatory than McClellan? He says that they should have executed a pursuit "as unremitting as that which succeeded the Battle of Jena": well, there was not much pursuing after Antietam.

He made, apart from fighting, two fatal mistakes, and that is why one is so sorry for him. He disliked politicians. Other soldiers have done so. Perhaps the classic instance is that astonishing orator, General Riley, of Missouri. An extract from one of his speeches, delivered just before the war, is worth quoting; there is about it an eloquence which, unfortunately, has never been heard in the Mother of Parliaments: "The people have been fed on buncombe, while a lot of spavined, ringboned, hamstrung, wind-galled, swine-eyed, split-hoofed, distempered, poll-eviled, pot-bellied politicians have had their noses in the public crib and there

ain't enough fodder left to make gruel for a sick grasshopper." Can you beat it? Or, to use the English equivalent of this phrase, that's the stuff to give 'em.

General McClellan's relations with Abraham Lincoln are painful reading. They both wanted only one thing, to win the war, but Lincoln perhaps expected too much of his General and, to soften a somewhat harsh British military phrase, messed him about in a manner which Grant was spared, for the great President learnt as the war progressed. And Lincoln's proddings and naggings of McClellan seem really to have been inspired by Stanton, the Secretary for War. In appearance Stanton was like Anthony Trollope in a very vile temper. He looks a grouch and as if he hated himself. He had an overbearing, bullying, insolent manner, a rough tongue, and was compact of conceit. The roughness of his tongue is evident from his remark, "Du Chaillu was a fool to wander all the way to Africa in search of the Original Gorilla which he could easily have found [in Abraham Lincoln] in Springfield, Illinois." One Englishman, Russell the *Times* correspondent, wrote: "No man who ever saw Mr. Stanton would expect from him courtesy of manner or delicacy of feeling." A greater Englishman, then, like Russell, in the States, Lord Wolseley, thought that he was mad. The historian of the American Civil War, Ropes, wrote: "Arrogant, impatient, irascible, Stanton was a terror and a marplot in the conduct of the war."

It must be remembered that McClellan was first and foremost an engineer. If you spend a good part of your youth designing latrines (Early Perpendicular) and building defences, though your latrines may perhaps turn out to be offensive, you yourself cannot be expected to be "as offensive as you might be," to quote the delightful phrase in one of our training leaflets issued during the European War.* An American soldier goes so far as to say "engineer service unfits men for command," and adduces the case of an Engineer Colonel of whom it was said that he was "an admirable officer—when absent from soldiers." Upton says of McClellan, "His services as an engineer with construction of fortifications—an essentially defensive art—inclined him to the order of defensive commanders." Just as General Frossard, a very distinguished engineer, in 1870 at Spicheren dug himself in and thought that nothing more was required of him: as a French writer in 1870 puts

* I think the actual words were, "Am I as offensive as I might be?" It sounds like the beginning of a tract, and is only equalled by the astonishing order, "Horses are not to be tethered to fruit-trees as they bark and destroy them."

it, *il s'exagéra le rôle actif des fortifications*. On the other hand, one must not forget that all the following were engineers: Carnot, Marshal Niel, Marshal Vaillant, Omar Pasha (who started as an engineer in the Austrian army) and Robert E. Lee, whom some place above Wellington. In our own army, to mention only a few names, there have been Lord Napier of Magdala, Gordon (who, it may now be forgotten, was specially chosen to put down the Tai-ping Rebellion before he was chosen, nobody seems to know exactly why, to go to his death in the Soudan), Sir John Ardagh,* Lord Nicholson and Lord Kitchener. Of Napoleon's men I think Berthier was the only one to begin in the scientific corps, and he left it very early. Napoleon said of him that at the Bridge of Lodi, May, 1796, he was in turn "gunner, horseman and grenadier." He might have added nepotist. In one of his despatches he mentioned *un morveux* (brat), as Napoleon called him, of sixteen no less than six times. To be mentioned at the age of sixteen six times in the same despatch is, I think, a record. But the *morveux* was the son of that Mme. Visconti to whom the Prince de Wagram et de Neufchâtel was devoted. And what is the good of being in a position to write a despatch if you cannot mention your lady friend's (or your lady friends') sons in it?

Like most sappers McClellan was a wonderful organizer. It has rightly been said that without him there would have been no troops for Grant to lead to victory. He possessed also the gift of making himself immensely popular with his men, a gift which some very great generals have lacked.

His second, and his greatest, mistake was that he invariably overestimated the number of the troops opposed to him. I remember reading somewhere that any negro questioned during the war as to the strength of the enemy at any particular point would always give the same answer, "About a million, sah." This is not helpful. Little Mac, as his men called him, seems generally to have been certain that the enemy was about twice as strong as he really was. His worst mistake seems to have been in October, 1861, when he estimated the strength of the enemy in Northern Virginia at 150,000, whereas they were really, so it appears, just over 57,000. These exaggerations account for that extreme cautiousness, that *cavendo tutus*, which was a perpetual exasperation to Lincoln. But how did he come to make such miscalculations? Well, this is where we make

* Quite the most learned soldier that the present Librarian of the War Office has ever met, with one possible exception, also a sapper. As he is living I will not give his name, but whenever I see him I learn something from him. It is like meeting that great man of the past, Eureka Archimedes.

the acquaintance of that amazing man, Major E. J. Allen, whose real name was Alan Pinkerton. He published in 1883 a very remarkable book called "The Spy of the Rebellion." From a literary point of view it is difficult to praise it. The style is quaint. You see that odious word "transpire" dotted about its pages. Birds are "feathered songsters who warble," a barber is a "tonsorial artist," and a young Southern lady, a Miss Harcourt, who falls in love at first sight with one of Mr. Pinkerton's "operatives," "with true maidenly modesty simply treated him with that delicate courtesy which, while it showed plainly her high regard for him, yet in no way overstepped the bounds of strict propriety," unlike Mr. Gowing who, it will be remembered, rarely did anything else. The "operative" is equally *comme-il-faut*. He says—they have known each other three days—"I make bold to tell you to-night something that, ordinarily, I would not mention until your longer acquaintance with me would make it appear more proper, at least so far as Society Rules are concerned." He then, "lightly pressing her hand to his lips," exclaimed, "Good-bye, Darling" (Pray, what is the matter with Honeybunch?), and dashed away on his noble, but spotted, steed, leaving Miss Harcourt standing in a "half-dazed manner," but not, I hope, too dazed to understand that she had just received what we used to call, according to Victorian Society Rules, "tantamount to a proposal." (These generally took place in draughty Town Halls during Hunt Balls; "tantamounts" were not very satisfactory as, very often, the next day the tantamounter would have such a headache, owing to the trifle having gone sour, that he would forget all about it).

But it is a shame to mock one's self at Mr. Pinkerton's style. I imagine that those notes which one so often sees our homely police making, with much licking of blunt and stumpy pencils, in their little books, are equally unliterary, and Mr. Pinkerton was really a glorified Secret Policeman, so one cannot blame him. Style or no style, it is a most interesting book. It gives a lively picture of the state of affairs at Washington, then thick with Southern spies. It was largely to deal with them that General McClellan called in Pinkerton's aid and gave him a free hand. He soon reported that the Confederates "had spies who are in the employment of this government or who possess facilities for acquiring information from the civil and military authorities, or bureaus, and this information is imparted to others and transmitted within a very short time to the rebel government." Much of this information was obtained by ladies of Southern sympathies, *Cherchez la femme* was Pinkerton's

watchword, and he certainly did not seek in vain. Take the case of Mrs. Rose Greenhow, who carried on anyhow. She knew everybody, particularly Army officers, and was suspected of pumping them dry. Pinkerton hid himself under her "stoop" * and secretly observed a Captain *in flagrante delicto*—handing over a map for which, when he left, he was rewarded with "something that sounded very much like a kiss." You will note that Pinkerton was a very cautious man, for the only thing that sounds like a kiss is another kiss. The more the pleasanter. (Cf. Catullus.) The result was that the Captain lost his commission and Mrs. Greenhow was, with considerable kindness, allowed to leave Washington for Richmond. Another lady who got into trouble was Mrs. Morton, wife of ex-Governor Morton of Florida, where the oranges come from and whither the suckers go. Pinkerton got hold of, and tried to pump, a member of her household, Uncle Gallus, and in spite of the latter's categorical statement "my missus is de bes' woman in de wu'ld, and nebber didn't do nuffin wrong in all her bawn days," the Mortons had their house searched and were also invited to leave for Richmond.

But the real hero of the book is Timothy Webster, the chief of Pinkerton's "operatives." His adventures are fine reading, though they had a tragic ending. He went to Baltimore, where he was spotted by a gentleman (casually alluded to as a "hell-hound"), one Bill Zigler, whom he first bluffed and then knocked down. Webster was a merry, light-hearted, hail-fellow-well-met kind of creature, a good mixer—he would have made an admirable "drummer" or commercial traveller—and he actually managed in Baltimore to get elected a member of a secret society. This was called The Knights of Liberty, and the open sesame to it was "Long Live Jeff Davis." Here he discovered that nearly 10,000 Baltimoreans, many of them not suspected in any way of disloyalty to the Union, were prepared to rise in arms and join the rebel army. Instead of which, thanks to Webster, the ringleaders were arrested and the society was dissolved. Webster then managed to get into Richmond itself. He made careful note of the batteries round the town, learnt that an English ship the *Bermuda*, which had run the blockade, had brought over 10,000 Enfield rifles and a number of rifled ordnance, and once more ran into the suspicious Bill, whom he again bluffed. Or, as Uncle Gallus, who also turned up in Richmond, put it, he "pulled de

* Perhaps I should explain, for the benefit of those who have not been in South Africa, that this was simply the veranda outside Mrs. Greenhow's house, and nothing more intimate.

wool over his eyes." He returned to Washington and was warmly thanked by McClellan. He then went back to Baltimore and was congratulated by those Knights of Liberty, who were lucky enough to be enjoying it, on having escaped arrest, so completely had he bamboozled them. So thoroughly did he play his part that he was actually arrested by another of Pinkerton's men, which shows that Mr. Pinkerton's system was admirably organized. Naturally, after secret explanations, he was allowed to escape and of course added greatly to his reputation as a Southern sympathizer. He gradually worked his way into the confidence of the War Department in Richmond and made numerous trips between that capital and Washington, bearing letters and despatches which, before they were delivered, were carefully investigated in Pinkerton's office. In January, 1862, Webster made what, unhappily, proved to be his last journey to the Southern capital. He was accompanied by a Mrs. Lawton, one of Pinkerton's female "operatives." At Richmond he fell ill: no news came from or about him. Pinkerton became uneasy. He sent two of his men, Price Lewis and John Scully, one may conclude of Welsh and Irish extraction, to try and find out what had happened. They saw Webster very ill in bed. But they also saw, and were seen by, Mr. Chase Morton, son of the Mrs. Morton whose house in Washington they had searched when she came under suspicion there. He recognized them and they were arrested. The Provost-Marshal, General Winder, appears to have had a grim sense of humour. Walking up to Lewis he greeted him cordially, warmly shaking him by the hand and saying, "How do you do, Mr. Lewis? And how is Mr. Seward *?" The two men were consigned to Henrico Jail, whence they managed to escape, aided by our old friend the straw-stuffed dummy, but were re-arrested, court-martialed and sentenced to death. It is very painful to read that Scully confessed everything, and Lewis followed suit. Webster was arrested and his two comrades bore evidence against him. Pinkerton learnt the news from a brief paragraph in a Southern paper. He saw the President and Stanton, a message was sent through to Jefferson Davis pointing out that the Federal Government had never executed a Southern spy and threatening reprisals. Mrs. Lawton, who had devotedly nursed Webster through his illness, obtained an interview with Mrs. Davis, who naturally could not interfere, and the unfortunate Webster, like many a brave and loyal spy before and after him, met his death on the scaffold. Lewis and Scully were sent back to Washington. Their story of course

* Lincoln's Secretary of State.

did not come out, and they were not lynched. But their lives from this date on cannot have been very happy.

Let us turn to more cheerful doings. It is pleasant to read in Mr. Pinkerton's book of the bar-life of the period. People are always "repairing to drinking-saloons": they drink each other's health and such healths as that of "Old Kaintuck." (And so will I, when I have finished writing this, because I like the way in which, according to the cinema, they crown a horse which wins a big race with garlands. But I do *not* like the lady jockeys as shown on the screen: their riding-breeches are far too tight. And I really cannot believe that grass can be blue: you cannot expect "weuns" to swallow that.) To revert to bardom, an army doctor, covered with gold lace, has "a wonderful stomach for harbouring liquor." One will put to another, not the cold, almost impertinent, question, "What is yours?" but will pleasantly and jocosely ask him to "step up and nominate your pizen." They "interview the bar-keeper" and "mutually indulge in decoctions." "Come, boys, let's lick" is as often in their mouths as the decoctions aforesaid.

And, next to the description of the drinking habits of the day, this book is worth its weight in gold, or perhaps coppers would be a more appropriate word, for its illustrations. They bear a great resemblance to those which used to adorn that delight of one's youth, *The Police Gazette*, that pink record of (as Gibbon says of History) the crimes and follies of mankind, and also, alas! of woman-kind. For I seem to remember that most numbers of this engaging periodical had pictures of very alluring ladies clad in what I think most of its readers would have called *dekolett*. And in their little right hands they generally brandished choppers, which rather detracted from their voluptuous appearance. Slapping from small, pink hands is well enough, but chopping, No. The frontispiece shows Allan Pinkerton, with beard and whiskers almost as fine as those of General Burnside,* and General McClellan "in private consultation." This is a remarkable piece of realism. It is extremely *ciaro*, and not at all *oscuro* as that great man, Mr. Ruskin,† would have said. As I look at it I can almost hear the clock on the mantelpiece tick. The time is 1.47 p.m., not a.m., because the gas is not lit. (One does not read books by detectives without picking up a little of the art of detection.) The General has one hand

* From whose name, I imagine, by some odd Grimms' Law, the word "sideburns" derives.

† Though he was not infallible. He said of that farago of sentimental tosh, the worst best-seller that ever was, "Boodle's Baby," that it contained the best account of Army life he had ever seen. Shucks!

raised and is evidently saying "Let us dissemble," or perhaps it is raised in anger and he is saying, "Gosh darn Stanton." Another plate shows "Mr. Lincoln raising the flag on Independence Hall," and a number of his supporters raising silk-hats and "derbys" of a most terrifying size and appearance. Then there is one of Pinkerton's "operatives" disguised as An English Lord who, by the way, always introduced himself as "Lord Henry Tracy, of Oxford, England," and I dare say he had this on his cards. And all I can say is, if we had nowadays many English lords like Lord Henry, well, we should have no occasion to lament the burning of the Chamber of Horrors. And some of our more impecunious peers might, at the rate of a tanner a time, be able to give the loud Ha! Ha! to the minions of Somerset House. There is also a spirited representation of that "baffled beast," Bill Zigler, being biffed on the boko in a bar-room. But the two best are, I think, firstly a scene in a dining-room, very agreeably be-bottled, with a number of gentlemen in boiled shirts with brimming glasses in their hands: the title is simple and straightforward, it sums up the whole scene in two words, "Warming Up." *Proxime accessit* is a woodland scene in which Miss Harcourt appears. I have always thought that spies must be very brave men; but I doubt if there was ever one more courageous, more willing to take fearful chances, and more self-sacrificing than that gallant operative who, scorning Society Rules, offered this lady his hand. For, quite apart from a certain homeliness of feature, the unhappy girl appears to have three legs, or at all events three feet. There is a popular prejudice in favour of woman-kind being a biped, not a triped. Because, of course, shoes, boots and silk stockings are so expensive.

THE FIRST DUKE OF WELLINGTON

BY CAPTAIN E. W. SHEPPARD, O.B.E., M.C.

LAST year it was announced that the Chief of the Imperial General Staff had laid down the career of the first Duke of Wellington as a subject for study by Army officers. It is hoped therefore that these few notes may be of interest to readers of the *Army Quarterly* as an introduction to the life of this great soldier. It is not easy to enter upon the study of the career of a military leader of the past without some knowledge of the times in which he lived, of the methods of warfare then in vogue, and of the men and means at his disposal—in a word, of the conditions which governed all his actions ; but to acquire this essential preliminary knowledge requires extensive reading, for which the average officer has neither the time nor the inclination. It is hoped here to outline at least as much of these conditions as will facilitate, for the reader who has no great acquaintance with the history of Wellington's wars, the task of gaining from his study of them some lessons of practical value to-day.

First of all, it seems desirable to give a brief sketch of the Duke as a man.

I. WELLINGTON AS A MAN

In seeking to picture Wellington, we must guard ourselves from being unduly influenced by the portraits drawn of him later in his life, by those who knew him only after his active military career was over. His character had by then ripened and to some extent mellowed ; he held an assured position in the minds and hearts of his fellow-countrymen ; and, whatever might be the vicissitudes of his political life—and they were many—his fame as a soldier was a cherished and unquestioned national possession. It is this picture of him, epitomized and enshrined in Tennyson's " Ode on the death of the Duke of Wellington," of which it is important to rid ourselves in order to replace it by a truer, if less pleasant, portrait of him in his earlier and more glorious rôle as the commander of a British Army in the field.

In personal appearance, he was of average height, of a spare, well-made figure, with small feet and fine hands ; he held himself well and walked well—though, oddly enough for his time, he did not, as we shall see, ride well. The most prominent features of his face, which bespoke plenty of character, were the long aquiline nose, a rabbit mouth with two projecting front teeth, and a heavy black-whiskered jaw, which made it necessary for him for the greater part of his life to shave twice a day. He had a harsh voice, and an unpleasant laugh, “like the whoop of whooping-cough constantly repeated.” In his early days he was something of a dandy, and to the end of his life he remained neat and spruce in his dress, and was always admirably turned out. For anything like military display, however, he had by the time of the Peninsular War developed a decided aversion ; he usually took the field dressed in a simple blue or grey frock-coat, riding-breeches with black leggings or boots, an oilskin-covered cocked hat without plume or feather, and a light sabre. He never wore any medals or decorations except on special occasions. Although generally well mounted, he seems himself to have been little judge of a horse ; and although a regular follower of hounds, he was a bad rider. This last seems to be a characteristic of great generals, Napoleon being, of course, the most famous example. Wellington’s seat on horseback was loose and ugly, as he sat so far back that his leg from knee to hip was almost parallel with the ground. Another peculiarity of his in this connection was that, though his eye for country was excellent, and his phrase about “seeing what was on the other side of the hill ” has become classical, he seems to have been deficient in what we should call “the bump of locality,” and habitually lost his way when returning from hunting or from a reconnaissance.

So much for the Duke’s outward appearance. As for his character, we have written elsewhere that few men with such an undeniable claim to greatness can have united in themselves so many unpleasant qualities. This may no doubt be attributed in part to the fact that he was unhappily married. His wife, Lady Catherine Pakenham, had been betrothed to him before he first sailed for India, but her parents, who did not consider Colonel Wellesley (as he then was) a good enough match for their daughter, refused their consent, and only sanctioned the marriage when he returned home after his triumphant career in that country. Meanwhile, Lady Catherine had lost much of her very considerable good looks owing to small-pox, and had, moreover, unknown to Wellington, promised herself to another suitor. The former fact

Wellington, to his credit, overlooked ; the latter, when he at length discovered it, proved a cause of increasing and at length complete estrangement between husband and wife. As a result of this, his relations with other women became extensive.

To women, then, he was always pleasant and attractive, as he was also to certain men, such as some of his younger aides-de-camp, Harry Smith and Colborne, with whom he often unbent, and for whom he did much. His personal servants were one and all devoted to him, and even to the end of his days he showed kindness to any one of his old soldiers with whom he came into personal contact. But to most men his was a frankly repellent nature. He was normally reserved, taciturn and aloof ; he possessed a fiercely mordant tongue and pen, which were frequently not under strict control. He seldom praised good work, but was disconcertingly swift to animadvert on any faults or errors ; and at times, though he prided himself, perhaps unduly, on being a gentleman, and on the strictest adherence to the standards of gentlemanly conduct, he so far forgot himself as to behave like a cad. He quarrelled bitterly with his brother, to whom he owed his rapid advancement to high command in India, where he laid the first foundations of his glorious career, and for twenty years never spoke or wrote to him. He is popularly supposed to have had above all things a high sense of duty—in fact, Tennyson's "Ode" insists on this as the key-note of his whole life. Certainly he exacted the strictest performance of duty from others and therefore presumably from himself ; but there arose, in actual fact, no occasion in his life when he was called upon to make choice between his own interests and ambitions and the claims of duty. It is known, moreover, that he once contemplated giving up his military career as he saw no hope of advancement in it, and that at the end of the First Mahratta War he insisted on returning home, where he considered his prospects would be better than in India. He is said to have had a strong religious faith, but it seems to have been that "religion of all sensible men," which, according to the old story, no sensible man will attempt to define.

The main reason for Wellington's personal unattractiveness, as one of his biographers has acutely said, was that he had an intellectual contempt for his social equals, and a social contempt for his intellectual equals. That being so, one would like to have heard his remarks on the plea so commonly put forward by the defenders of the purchase of Commissions in the Army at the time of its abolition that there could be little fault to be found with a

system which had given the Army such a man as the Duke of Wellington—as though he were a normal product of it.

So much for the man. We must now turn for a few moments to the troops whom he commanded.

II. THE BRITISH ARMY OF WELLINGTON'S DAY

It is not our purpose to enter upon any description of the Indian Armies which Wellesley led to victory at Assaye and Argam, since, although his career in India was a highly creditable one, and the study of his campaigns is full of interest and of valuable lessons for us to-day, his achievements in that country were paralleled and even surpassed by other commanders both before and since his day, and had his fame rested on them alone, it would be in no way unique. We shall, therefore, deal here solely with the British Armies of the Peninsula and Waterloo.

At the time when Wellington first took command in Portugal, the British Army had served a considerable, if not highly creditable, apprenticeship in fifteen years of fighting all over the world, and was a far more effective engine of war than the ill-found, ill-trained, ill-led, and poor-spirited force that had taken the field under the Duke of York in 1793, and in which its new general had received his baptism of fire. Yet could a present-day soldier be suddenly carried back a hundred and twenty years and find himself in the midst of this army of 1808, he would see much which would surprise and shock him.

It must be remembered that what was, until the outbreak of a still greater war, known as the Great War with France, was not a national war as we of to-day understand the term. There lay no obligation, legal or moral, fancied or real, on every able-bodied man to drop whatever he might normally be doing—even if this happened to be nothing in particular—and take up arms to serve his country in the field or on the seas; and the gentlemen of England might, if it so pleased them, continue to sit at home at ease, undisturbed by the future prospect of being asked by their children what “Daddy had done in the Great War.” In theory, indeed, the whole nation had been called to enrol for home defence; but actually, as the homeland never came to need such defence as could have been provided by the numerous and multifarious corps of militia, volunteers and fencibles raised for the purpose, such liability for service involved little more than the obligation—for those who were too poor to afford to pay a substitute, and unlucky enough to draw the wrong number in the

ballot for recruits—to do a certain amount of military training and to wear a good uniform. Men from these home defence corps could be induced, at a price, to enlist in the Regular Army for service oversea ; and this was one of the main sources from which Wellington filled the ranks of his regiments. Moreover, these men formed the best element in his army ; they knew something of soldiering, had the rudiments of discipline, and were actuated by some degree at least of patriotism and enthusiasm for the cause in which they were fighting. For the rest the regiments were made up with the usual assortment of poor material, “ bull-dozed ” clod-hoppers, feckless artisans, village ne’er-do-wells, and corner-boys from the towns, with a considerable leavening of the criminal classes and of men who—unwisely, according to Dr. Johnson’s well-known dictum—had preferred going for a soldier to going to gaol. Their non-commissioned officers, who had considerably less responsibility than the non-commissioned officers of to-day, and would have been quite incapable of carrying out such duties as he performs, had the defects and qualities of their men ; they were, however, usually better educated and were drawn from a slightly higher social class.

The officers were all gentlemen and possessed of considerable wealth ; otherwise, in days when a first commission in the army and every subsequent step in rank had normally to be bought and paid for, they would hardly have remained officers for long. Most of them possessed by now a sufficient working acquaintance with the routine of their profession and of their normal duties in the field ; and practically all were gallant leaders in battle or in an assault on a breach. If their military knowledge, especially in the more skilled arms, left something to be desired, and if there was a small leavening of undesirables, shirkers and cowards, and a rather larger number of inefficient, bullies and tyrants, the officer corps was on the whole a credit to the army and to the country, and, at all events, a vast improvement on the ignorant, careless and corrupt crew with which the unfortunate British regiments had been cursed in their first campaign fifteen years back.

Even in 1808, however, the Army had some curious characteristics and some decided faults, though it is arguable that these were national rather than peculiar to it alone. The Duke himself frequently described it in scathing terms. “ Truth-lover was our English Duke,” says Tennyson—particularly, one must add, when the truth was an unpleasant one ; and though it may seem both ungrateful and ungracious for a general who owed his fame and fortune to his soldiers to say that “ they were the scum of the earth,

who had all enlisted for drink," there was more than a little truth in the statement. The British Army, like the British people, was at that date extraordinarily addicted to drink and got itself drunk whenever it had the chance. The non-commissioned officers of the Guards were said to be drunk every night after they had done their daily duties ; others got drunk earlier. The desire for drink frequently got the better of that "immediate fear of corporal punishment" which Wellington once declared to be the only thing that could influence the British soldier, and, when once the bonds of discipline gave way, whole masses of men drank themselves incapable, mad or dead. Discipline itself, too, was rather different from what we to-day understand by the term ; strictly and even ferociously enforced on parade or in battle by means of hideously severe punishments, it was often surprisingly lax on the march or in bivouac. It did not extend, for instance, to making the soldier, still less the officer, wear the authorised pattern of uniform and equipment laid down for his corps. It allowed of indiscriminate requisitioning and was for a long time entirely ineffective to prevent the army, and every man in it, as opportunity offered, from plundering wholesale and far and wide. It gave way entirely on a retreat or after the storm of a fortress, and only resumed its sway after the infliction of a number of summary and drastic punishments.* For four years Wellington strove to render his troops more amenable to discipline, and his efforts at length met with success ; when it crossed the frontier between France and Spain in 1813, it no longer pillaged, but paid for everything it took from the inhabitants, and committed few more military crimes than one would expect a British Army of to-day to commit in similar circumstances. By this time, too, it had been purged of its most undesirable elements, had acquired confidence in itself, and in its leaders, and had taken the measure of its enemies—in a word, it had been welded into a really efficient fighting machine with which, as its chief said in one of his rare moments of expansiveness, "he could go anywhere and do anything." It is to be presumed, however, that the soldiers still dressed as they liked ; and it was not so easy to get drunk on

* Mr. Fortescue, in his recently published life of the Duke, says that this weakness of discipline was due to the fact that regimental courts-martial, which were the normal means of enforcing it, and had previously been family affairs conducted by gentlemen for gentlemen, were now called upon to act as regular courts, by swearing witnesses, considering cases on their merits, and deciding in accordance with the evidence. The widespread confusion and general indignation which followed this attempt to make these courts do what they were supposed to do in the way they were supposed to do it is an amusing and luminous commentary on the peculiarities of the British national character.

the light wines of South France as on the *aquardente* of Portugal or Spain.

The army of Waterloo need not be described at length. Wellington called it an infamous army, and it was certainly an inferior instrument of war. The non-British elements in it, except for the King's German Legion, which were first-rate troops, were barely mediocre, and many of them of really bad material, on which no commander, least of all the Duke, acutely conscious as he always was of the defects of those under him, could place much reliance. The British infantry regiments were a mixture of raw units, hurriedly raised, weak in numbers, of a low standard of efficiency, and of corps which had served with credit in the Peninsula, but were also much below strength, owing to the discharge of their best and most experienced men on becoming time-expired. The cavalry and artillery were little better, the latter especially being seriously below establishment. And yet these puny and ill-trained British units were the best element in the army, and had to be carefully distributed so as to give cohesion to their less reliable comrades-in-arms. With this poor weapon in his hand the Duke had to meet and parry the blows of the greatest master of war at all time, who fortunately for him had lost something of his cunning and whose troops also were by no means first-rate. It is certain that a motley host such as this one of Wellington's could never have carried out an attack, executed a manœuvre, or stood up to the strain of a long campaign. Fortunately, before a week had elapsed it was called upon to fight a decisive battle in which its rôle was to root itself firmly to the ground and get itself shot to pieces.

III. WELLINGTON'S RELATIONS WITH HIS ARMY

Wellington's relations alike with his subordinates and with his army in general were exactly what one would have expected of the man. His divisional generals and the chiefs of arms and services were, one and all, English gentlemen; one historian unkindly adds that they were "mostly duffers," but perhaps this was then the same thing. In any case he treated them much as if he mistrusted their abilities. He expected his orders to be obeyed implicitly, and dealt severely with any failure in this respect. In this he was, of course, right; but, like many another great leader, he was unwilling to leave to those under him any sort of initiative, kept his own counsel, divulged his plans to none of them, and treated them, in short, not as intelligent collaborators, but as mere

blind instruments for the execution of his will. The one exception to this was Lord Hill, whom he did trust entirely, and who showed in many an independent operation that he was worthy of such trust. But his other generals he neither believed to be, nor sought to render, so worthy ; and the result was that when he himself was not present, things often went sadly awry. In the few instances in which one of his subordinates actually exercised his powers of independent judgment, he always had to face a storm of severe and often unmerited reproof from the Duke ; when the results of his initiative were unfortunate, the offence was never forgotten or forgiven ; and even if it turned out well, the Duke still disapproved on principle, and said so. His staff in like manner were merely clerks and in no sense assistants ; they did what they were told to do and no more, and if not told to do anything, did nothing. Finally, when once the war was over, Wellington dismissed his subordinates from his mind and thoughts, and saw little or nothing more of them for the rest of his life. They had been his tools, not his friends ; and now that their work was done, he had done with them.

His relations with the remainder of the army were no more close or cordial. Love for their General-in-Chief is not normally a characteristic of the British soldier. Such affection as he feels is usually reserved for his own regimental officers, to whom he is normally devoted ; but the General is too Olympian and too distant ; he may be admired, but hardly loved. For Wellington his men certainly had a real respect and admiration ; his long nose on a battlefield was worth forty thousand men to them, and they knew it. But none of them ever professed to feel any affection for him, and in truth few could ever have had any reason to feel it. The Duke must have appeared to them habitually unappreciative of their labour and sacrifices. He took no interest in their welfare beyond what a good craftsman will always take in the state of his tools, as long as he has need of them. He did his best to feed, arm and clothe them ; but he rarely rode round their bivouacs or conversed with them, and seldom sought to inquire into their grievances or to remedy their complaints. He is believed never to have visited the hospitals, because, it is to be presumed, sick and wounded men were of no military value as such, and consequently unworthy of his time and attention. He rarely praised good work since it seemed to him unreasonable to praise any man for doing what, after all, was his simple duty, whereas he was ever quick to notice and castigate shortcomings and errors—even pardonable or excusable ones—because clearly in all such cases the offender had failed to do his

duty. Unhappily, he had a habit of promiscuous fault-finding ; and if, as has been said of him, his general orders were usually the reverse of complimentary, it was because he often held the whole army to blame for the fault of a few individuals. After the retreat from Burgos he issued a scathing document, confounding the innocent with the guilty in one tirade of fierce and bitter censure. In a private letter written some years after Waterloo he roundly accused the whole of the British artillery of having run away from the battle, complete with their teams and limbers, leaving only their guns behind them. Only a man who thought little of his fellow-men, and was prepared on the slightest provocation to believe the worst of them, could have made himself responsible for such statements as these. At the end of the Peninsular War it was said, even by Napier, that he at once forgot the army which he had led to victory and the soldiers who composed it. He opposed the grant of a medal to them, although he himself had deservedly acquired many decorations ; he took no interest in their many grievances as regards pay and pensions ; he did little to improve the lot of those who remained in the Service ; and he even spoke cruelly and unjustly, both in public and in private, of the troops who at all events had rarely failed him in the face of the enemy. Some of these accusations had, alas ! a foundation of truth ; others made insufficient allowance for the inevitable difficulties of every post-war period. But that they should have been made at all against one of the greatest, if not the greatest, of British generals proves that his place in the hearts of the men he has led from victory to victory was neither particularly high nor completely assured.

IV. WELLINGTON AS A STRATEGIST

When all this has been taken into consideration, it seems to us impossible to deny the supreme military greatness of Wellington or to over-estimate the services he rendered to his country and to Europe. This greatness, moreover, was a peculiarly British greatness, the services which he rendered were such as would have been beyond the powers of any but a very great Englishman, just because his problems were such as only a British Army was fitted successfully to solve.

If we take the Peninsular War first, the problem was : how to afford to the resistance of the Spaniards and Portuguese such stiffening as would prevent a complete French conquest of the country, and allow their guerilla operations to take daily toll of the

invaders, whose forces would gradually be so reduced that they would no longer be able to maintain what they had won. To solve this problem required troops of high fighting quality, fit to meet the French in battle, and an organization allowing of the constant maintenance of an army in a poor and barren country. Above all, there was needed a general who should unite to inexhaustible patience and invincible determination when on the defensive a resolute purpose to make this defensive only the prelude to an offensive when the opportunity should arise, the insight to recognize that opportunity, and the courage and will-power to exploit it to the full. That all these requirements were actually met, and the problem so brilliantly and successfully solved, was first and foremost Wellington's work, and remains his enduring title to fame.

He was all the time, of course, labouring under the very great difficulties which attend every British commander in the field. His army was a precious thing which could not be lightly risked or readily replaced ; its loss would have involved not only himself, but the Government which he served, and in all probability also the cause of his country, in irretrievable ruin. The risks were fearful ; the responsibility tremendous ; the consequences of success or failure in every way vital. He had to minimize these risks by every means in his power—except by the easiest means, that of inactivity, which neither he nor the country could in the long run afford. He had perforce to act, but to act only when he could do so with the least danger to his own army and when a chance afforded itself of seriously harming his enemies.

Fortunately for Wellington the Spanish peninsula was a theatre of war which afforded considerable advantages to an army based, as was his, on the sea, with all the wealth of a great country behind it, and with the resources of the world to draw on. It was possible for such an army, once it had accumulated sufficient supplies in its depôts, and had established a satisfactory system for delivering these supplies to the front, to move where it would, to concentrate as and when required, to remain concentrated as long as necessary, and to disperse over a wide area when safe and convenient. The French, on the other hand, who had no large depôts of supplies to draw on, and who relied on the resources of the country, which were in this case inadequate in quantity, unsuitable in quality, and hard to collect and distribute, were much less free in their actions. They could only assemble their forces when they had accumulated sufficient store of food to allow them to do so, and had to disperse again once this was exhausted. Moreover, since they were in

occupation of a foreign country, they were of necessity widely dispersed in an attempt to hold as large an area as possible, and any attempt at concentration meant at least a temporary reduction of the area occupied by them. Hence Wellington was always in a position to concentrate more quickly, to keep his army together longer, and, when the time came, to disperse more readily than his adversaries. He was thus enabled, as necessity demanded, to evade their blows until their armies were no longer in a position to attack him with superior numbers ; to strike rapidly at their isolated detachments or their fortresses and overwhelm them before help could come ; to fight, if fight he must, only on his own chosen ground ; and, in a word, gradually to wear down his enemies at the least possible cost to himself. This was the work of the four years from 1808 to 1812. Thenceforward the tables were turned and the French in the Peninsula, exhausted by the constant guerilla warfare of the Spaniards and by a series of costly and unsuccessful battles against the British, and deprived of all hope of reinforcements owing to the demands of Napoleon's armies in their struggle elsewhere in Europe, had to surrender the initiative to their enemies. Wellington, with the high capacity for manœuvre conferred on him by the British Navy's command of the sea, and his own admirable supply system, was then able in a vigorous and sustained offensive to force them out of Spain, and to carry the war to a triumphant conclusion on the soil of France itself.

In the Waterloo campaign these conditions, so favourable to Wellington's methods of making war, were no longer the same ; nor was his strategy of so high an order. But though, as even his admirers must admit, in the opening moves of the war, he and his colleague Blücher were outmanœuvred by Napoleon, the failure of the latter to exploit his initial advantage gave them a breathing-space for recovery, of which both took skilful advantage. Wellington, breaking off from in front of his adversary by an admirable rear-guard action, fell back to a position of his own choosing, which the Emperor had no choice but to attack. Thus he regained control of the operations, and compelled his enemy to fight a battle which in the existing strategical situation, with the British on his front and the Prussians on his flank, must, if lost, be lost irretrievably. So it turned out ; and the event showed once more the surety of the Duke's strategical methods and the master-qualities of his intellect and will.

V. WELLINGTON AS A TACTICIAN

It is, of course, true that even the most fertile strategy is of no avail unless its fruits can be gathered tactically on the field of battle. In Wellington's tactics, then, must be sought both the foundation and the culmination of his strategy. Even before he set foot in the Peninsula he seems to have thought out the tactical methods which he was so successfully to employ in the next five years, first against Napoleon's marshals, then against the great Emperor himself.

All the previous battles of the Napoleonic wars had been in essence duels between the line formations of the older European Armies and the skirmishers and columns of the French; and hitherto the results had shown a heavy balance in favour of the latter. Wellington firmly believed that the line, which allowed of a greater volume of regulated and ordered fire, was still in reality the superior of the column; but he realized that the line, if full value was to be got from it, must not be exposed for a long period before the hostile columns came within range, to be harassed by the fire of clouds of skirmishers and shot to pieces by massed artillery, and so rendered unfit to withstand the moral and material shock of the final assault. He also covered his front, therefore, with skirmishers in sufficient strength to hold at a distance those of the enemy; he chose for his deployed lines a sheltered position behind the crest of a hill, or under cover of a village or a wood, where they could await in comparative security the arrival of their assailants, and he carefully secured their flanks either with cavalry or by some feature of the ground. In these conditions his faith was vindicated, and the French columns invariably melted away before the steady and accurate fire of the British line. Thus on his own chosen ground Wellington could normally be sure of victory in a defensive battle. When the time came to assume the offensive, he again relied on line formations; the results showed that properly employed, troops so arrayed could overcome the resistance of the French, who were never at their best when on the defensive, were not at this time of very good quality, and had seriously suffered both physically and morally from the effects of a long series of defeats.

At Waterloo again Wellington was in a position finally to test and to prove his methods of fighting a defensive battle, against a fully worthy foe, and the result must have given him eminent satisfaction; for, even if it be admitted that the French Army was hardly a first-class fighting machine—though far better than that of the Allies—and that its handling in the attack was by no means a model

of tactical skill, the battle as fought by the Duke was a defensive masterpiece which bears the unmistakable stamp of his genius and which no other man but himself could have conducted to a victorious conclusion.

VI. WELLINGTON'S ADMINISTRATIVE METHODS

This sketch of Wellington would not be complete without a few words on his administrative methods. As has been shown below, sound administration was the very basis of his strategy, and it was his superiority in this respect that enabled him throughout the Peninsular War to keep the whip hand of his opponents. He had, however, great difficulties to contend with; there were at this time practically no organized supply or transport services forming part of the army, so that he had mainly to rely on local resources. Arms, stores and supplies were certainly brought in large quantities by sea to the bases, first at Lisbon, then in 1813 and 1814 in the harbours of the north coast of Spain; but as regards supplies, at any rate, these were in no way adequate for the army's needs and had always to be supplemented by purchase within the country. Moreover, the only means of transport available for all purposes were either primitive carts or pack animals, all of which, together with their drivers, had to be procured locally and paid for in hard cash. The collection and handling of all this material, and of the men and animals to carry it, was a vast and complicated business, which was not rendered any easier for Wellington by the fact that he was constantly short of ready money to pay for what had been requisitioned. Yet it was successfully carried on, thanks to the devoted labour and untiring zeal of the corps of commissaries who were primarily responsible for the supply and transport services, and to the careful forethought and wise provision of the Duke himself. On one or two occasions only throughout the war—as in the Talavera campaign, when Wellington placed undue reliance on Spanish promises which were never fulfilled, and again at the end of the retreat from Burgos—was the army as a whole really short of essential supplies; at all other times it was easily the best fed and best provided force in the Peninsula or indeed in Europe. Wellington in fact spared no pains and labour to make all his plans administratively sound; he went carefully, perhaps excessively, into every detail, issued a multitude of orders, and, what is more, saw that they were carried out, and waged unceasing war against everything, whether it were apathy at home, slackness in the Navy, untrust-

worthiness in Spanish or Portuguese officials, or carelessness, corruption, or inefficiency in his own subordinates, which in any way hindered the steady and even flow to the army of everything it could require. He fully realized that the British soldier, although not so capable as the resourceful Frenchman of looking after himself and providing unbidden and undirected for his own needs, is, if he can be brought to the battlefield full-fed and fighting-fit, the equal of any soldier in Europe ; and it was his constant care that the magnificent military qualities of his men should never be diminished by any administrative failure or lack of efficiency.

VII. CONCLUSION

British officers are bound to profit much from their study of the career of the Duke of Wellington, for he is perhaps the most English of generals, and the problems with which he so triumphantly dealt are such as are likely to recur in any future European war in which we may be engaged. How to make the best use for military ends of the advantages conferred by the command of the sea ; how to employ most economically and most usefully the initially limited power of our army ; how to organize the administrative services so as to ensure to that army the greatest possible mobility and manœuvring power ; how to get the best tactical value out of the splendid fighter the British soldier has always proved himself to be—these were Wellington's problems in the past ; these will assuredly be our problems in the future. We shall be well on the way to solving them if our study of the great Duke's life has taught us something of his clear common-sense, his grip of essential facts, his broad vision, his wise restraint, and his opportune boldness, and his serenity of mind which no good fortune could elate or render reckless, and which no danger could terrify or depress.

COORDINATION OF THE ARTILLERY AND MACHINE-GUN FIRE PLAN IN THE ATTACK

BY COLONEL L. F. RENNY, C.M.G., D.S.O.

INFANTRY Training, vol. ii, sec. 6, tells us that " Fire is the dominant factor in modern war." Lieut.-Colonel Anstey in an article entitled " What Infantry expect from Artillery," in the *R.A. Journal*, July, 1927, has pointed out very pertinently that it is only in the most recent editions of our training manuals that any mention has been made of the necessity for a fire plan whether in attack or defence.

This is all the more strange in view of the lessons of the late war, in which the fire plan played such a predominant part. It seems to me that the policy " back to mobile warfare " has, up to date, led us to neglect or to discard some of the lessons learnt at great expense during the years 1914-1918—lessons which are equally applicable to " mobile " as to " static " warfare.

Although much is said in our training manuals, particularly in ch. iii, I.T. vol. ii, on the subject of the coordination of artillery and machine-gun fire in defence, little if anything is said with regard to this question in attack, an omission which, personally, I think should be corrected. Surely this subject looms very large in view of the considerable increase in machine guns which we are told is contemplated for the expeditionary force. We ended the late war with 64 machine guns in the division : we are now, apparently, to have 144.

For a consideration of this subject, it is necessary to be quite clear in our minds as to the difference between an " encounter " attack and a " deliberate " attack. An " encounter " attack is defined in F.S.R. as follows : " The enemy may be met with on the move or in a position which he has occupied hastily and has had no time to organize for defence. An attack under such conditions may be called an encounter attack." *

It is further pointed out † that time is of the utmost importance ;

* See F.S.R. ii, sec. 67 (2) (a), and compare I.T. vol. ii, sec. 12 (2) (i).

† See F.S.R. ii, sec. 69 (i).

decisions must be made rapidly ; the plan of attack must be simple and must be capable of being put into effect rapidly.

It is clear, I think, that in such circumstances cooperation between artillery and machine guns cannot be effected on any large scale, but can only be arranged very locally by subordinate commanders on the spot, *e.g.* between "forward" machine guns and close-support artillery.

With regard to the "deliberate" attack F.S.R. says : "It has been pointed out that with time and suitable resources an enemy can quickly organize his defence in such a way that some form of deliberate attack will be necessary to overcome them."* The question is, how much time? Experience in the late war goes to show that, given twelve to twenty-four hours, defences can be constructed of such a nature as to entail "some form of deliberate" attack to overcome them. In an attack of this nature a fire plan will be necessary, coordination of artillery and machine-gun fire can and should be effected. It is with such an attack that I am dealing, let us say an attack by a division, forming part of a larger force, which has been ordered to carry out a decisive attack against a portion of the hostile front, an operation which may take anything from eight to twenty-four hours to stage. It is necessary to bear in mind that time, varying in amount according to the circumstances, is necessary if a coordinate fire plan is to be produced.

I think that an attack of this nature may be divided into three phases :

- (1) The period during which the crust of the hostile defensive zone is being broken. The chief concern of the attacker during this phase will be to get his infantry through the belt, or zone, of fire which the defender will put down in front of his position.
- (2) Assuming that the attack has penetrated into the hostile position, there will supervene a period during which the attacking infantry will have out-run in great measure the support of the original fire plan and will be dependent in the main on its own fire resources plus the support of such close support artillery as may be available. This phase may, in some degree, be compared with the "encounter" attack, and during it the whole attack may be brought to a standstill before the final objective is reached, and it may then be necessary to formulate a new and complete fire plan for the division as a whole.

* See F.S.R. ii, sec. 77 (1).

- (3) When the final objective is attained, a period will ensue for the consolidation of the position.*

I will now examine briefly to what extent and in what manner cooperation can be effected between the artillery and the machine guns of the attack in each of these three phases.

One of the tasks allotted to the artillery in the attack is "preparation," † that is before the attack is actually launched. The object is to inflict losses, to undermine the moral of the defence, to interfere with traffic on roads, etc. We are warned that such preparation may militate against the attainment of complete surprise. But, if it is decided that such preparation is to be carried out, there is ample scope for cooperation therein between artillery and machine guns. We can call to mind how frequently such combined harassing fire was carried out during the late war, and what carefully thought-out plans were made for the purpose.

In the first phase of the attack, the breaking of the crust of the hostile defensive zone, during which, as I have said, the main concern of the attacker will be to pass his infantry through the belt, or zone, of fire which the defender will put down in front of his position, there is wide scope for cooperation between the attacking artillery and machine guns.

In order that the attacking infantry may pass through this belt of fire with the minimum of casualties and disorganization, it will be necessary to keep down, or to subdue, the fire of the defender's artillery and machine-guns as well as that in all probability from some of his forward infantry localities.

Counter-battery work is obviously the task of the artillery. Unless, and until, we perfect the machine-gun bullet so as to have an effective range of over 5,000 yards, machine guns cannot take any part in this. The proportion of his artillery which a commander will allot to counter-battery work will no doubt depend on the amount of information that has been obtained as to the location of hostile batteries and the possibilities of air cooperation. The more artillery allotted to counter-battery work the more will the onus of subduing the fire of the defender's machine guns and infantry localities fall on the machine guns of the attack. Before he can formulate an initial fire plan in the attack, a commander must, by means of reconnaissance, and by what Lieut.-Colonel Anstey, in the article which I have already quoted, calls "intelligent anticipation," decide on the areas or localities on which the covering fire of his artillery and machine guns is to be put down. He must put himself,

* See I.T. vol. ii, sec. 12 (5).

† See I.T. vol. ii, sec. 5 (8) (i).

as it were, in the defender's position and decide in what localities the defender is likely to site his machine guns. By means of personal and aerial reconnaissance it may be possible to discover the site of some, if not all, of the hostile infantry localities. Which of these various areas or localities, *i.e.* targets, are to be allotted to the artillery and which to the machine guns? Some will be out of machine-gun range and must be taken on by the artillery. The limitations of machine-gun overhead fire on flat ground are well known; this factor may necessitate allotting certain areas to machine guns, because of the facilities thereby afforded them of producing overhead fire with safety to their own troops. Some portions of the hostile position may afford more favourable killing ground for machine guns than for artillery and *vice versa*.

The machine-gun covering fire for the support of one of the leading infantry brigades may best be afforded by machine guns positioned in rear of the other brigade.

It may be intended to launch tanks against a portion of the front selected for decisive attack; will machine-gun fire as well as artillery fire be required to support the tanks? I have said enough, I think, to show that there is wide scope for coordination of artillery and machine-gun fire in this phase of the attack.

The question now arises—since the artillery portion of the initial fire plan will normally be on a divisional basis, must not the machine-gun plan also be on a divisional basis if real coordination is to be effected? This brings me to a closer consideration of the machine-gun side of the question. We are to have 144 machine guns in a division. It is impossible to conceive these remaining in packets of twelve in each of the twelve battalions in a division throughout an attack. Unfortunately our training manuals do not give us much light and guidance on this subject.

What I am about to say, therefore, is only my own opinion, offered for what it is worth. We are told that, in the attack, machine guns are normally divided into three categories or echelons,* *viz.*: (a) forward guns, whose rôle is to work forward in immediate support of the leading troops; (b) supporting guns, which will be disposed so as to: (i) consolidate tactical localities as they are won; (ii) cover the flanks; (iii) increase the volume of covering fire where necessary; † and (c) reserve guns.

I am aware that there exists, in our Army, a school of thought which lays particular stress on the value of "forward" machine guns, which, in fact, advocates that the bulk of the available machine

* See M.G.T. sec. 93 (3).

† See F.S.R. ii, sec. 70 (7).

guns should be pushed forward amongst the foremost bodies of the leading infantry. Such a doctrine appears to me to ignore the machine-gun lessons of the late war and fails to appreciate the high value of the rôles allotted to machine guns under (b) and (c) above. Our training manuals lay the greatest stress on the necessity for disposition of machine guns in depth.*

What then should be the relative proportion between the three different echelons mentioned above? This will, of course, vary according to circumstances in each case. But in the initial stage of an attack such as we are considering, I think that the bulk of the available machine guns should be used, in cooperation with the artillery, to produce that volume of covering fire which is so essential if the attacking infantry is to break the crust of the enemy's defensive zone. Assuming that the division is attacking on a two brigade front, I suggest that, normally, it will be sufficient to leave up to at most sixty-four machine guns with the two leading brigades to carry out the tasks of forward and supporting guns in the first instance, in addition to allowing for a reserve of machine guns in the hands of each of those brigade commanders.

This will mean that eighty machine guns will be available to play their part in the initial coordinated fire plan. It is well to realize the large area of ground which could by this means be kept under effective machine-gun fire. Even allowing only 20 yards of front per gun and considering frontal fire alone, the frontage covered would amount to 1,600 yards. In the machine-gun barrages fired during the late war it was usual to allot up to 40 yards of front per gun.

The limitations of ammunition supply in mobile warfare must, of course, be borne in mind. It is not intended to imply that anything approaching the weight of the artillery and machine-gun barrages of the late war can be supplied. The covering fire will take the form of "limited" barrages or "concentrations" for short periods.†

As soon as the attacking infantry has penetrated the crust of the hostile position, decentralization will be necessary. The divisional commander whilst retaining a proportion of the machine guns in reserve may return to the leading brigades some or all of those guns which were withdrawn from them for the purpose of the initial fire plan. Similarly, some decentralization of the artillery will be necessary.‡

* "As a general rule, therefore, no machine guns should be with the forward companies." See F.S.R. ii, sec. 71 (10).

† See F.S.R. ii, sec. 72 (ii), and I.T. vol. ii, sec. 5 (8) (ii).

‡ See F.S.R. ii, sec. 81 (3).

I must pass on now to the second phase of the attack—the period during which the infantry has advanced beyond the support of the initial covering fire, certainly beyond that of the machine guns. Unless and until the whole attack is brought to a standstill, necessitating a new fire plan on a divisional basis, there cannot, I think, be the same measure of coordination between artillery and machine guns during this phase as can be effected during the initial phase of an attack. Decentralization will be necessary, and such coordination as may be possible must be effected by local commanders as circumstances arise. In this connection I should like to draw attention to the possibilities of cooperation between close support artillery and forward machine guns. A battalion finds itself checked by a centre of resistance within the enemy's defensive zone. The O.C. battalion has at his call his close support artillery and his own machine guns : he must make a definite plan for overcoming the hostile resistance. Is not this again a question of coordination of artillery machine-gun fire ?

Throughout this phase of the attack there is, of course, the important question of the consolidation of the ground gained, a task for which machine guns are particularly suitable and which, indeed, is definitely assigned to them in our training manuals.

Finally, there must be considered the third phase of the attack, *i.e.* the consolidation of the last objective.

The need for coordination of artillery and machine-gun fire in this phase is obvious. It is a matter of defence.* The difficulty will always be to arrange for a combined fire plan to take effect in time. The circumstances will, of course, vary in every case ; but the more a definite fire plan for consolidation can be foreseen and pre-arranged the greater will be the chance of success in beating off counter-attacks. The chief danger lies in the launching of a counter-attack by the enemy before a fire plan to cover the consolidation can be put into effect.

There were numerous examples in the late war of counter-attacks being beaten off by combined artillery and machine-gun fire. Our capture of Messines Ridge in 1917 is a notable example ; not one of the German counter-attacks ever reached our forward troops. In this case definite arrangements had been made for a coordinated fire plan to cover consolidation. On the other hand, there were numerous examples in other engagements of counter-

* See "The Coordination of Fire-Power in Defence," by Colonel L. F. Renny, C.M.G., D.S.O., *Army Quarterly*, April, 1927.

attacks succeeding owing to the lack, or inadequacy, of the fire plan to cover consolidation.

I have now considered the subject in its broader aspects. Unfortunately there is a large fly in the ointment !

We talk and write a lot about the necessity for coordination of fire-power, which all are agreed is highly desirable, not to say essential. But what practical steps do we take to put this coordination into effect ? Who is going to carry it out in the field ? On the one side we have the highly trained, expert Royal Regiment of Artillery comprising in its ranks C.R.A.'s, brigade and battery commanders all fully competent to advise on, and to put into effect, their portion of the fire plan. On the other side—the machine-gun side—what have we ? Nothing ! There is not even a brigade machine-gun officer included in War Establishments !

There is, of course, no magic in machine gunnery. But a certain amount of technical knowledge must be possessed by those who are called upon to organize and to carry out a coordinated fire plan. Even if our infantry brigade commanders, brigade majors and General Staff officers all possessed the necessary technical knowledge, would they have the time and opportunity in the field to work out the details of such a plan ? This appears to me to be the weak link in the chain ; one which we ought to take steps to strengthen.

THE FUNCTION OF THE MILITARY ENGINEER IN THE ARMY OF TO-DAY

“ Pas de Culte sans Mystère ? ”

THERE is a very distinct feeling abroad to-day that all those who deal in any particular branch of science take especial pains to surround their profession with mystery. Whilst it may be possible to afford the luxury of this atmosphere in civil life, such a practice, by any arm or branch of the Army, is at once fatal to the attainment of that high degree of cooperation which is demanded to-day, more than ever before, if the various arms employed are to attain success in battle.

Whilst a layman, therefore, may argue that the military engineer is beyond his comprehension both as regards method and mentality, it can be said from bitter experience that no one can suffer more from being misunderstood and misapplied, than can the military engineer, and consequently the laity can rest assured that he does not consciously strive to extend the alleged atmosphere of mystery. *Esprit de corps* is a wonderful thing, but, if ignorantly and short-sightedly encouraged, it may promote a state of self-sufficiency, an air of aloof mystery, resulting in a total incapacity to understand, and consequently to cooperate with, another arm. In recent years the function of the military engineer has become somewhat dimmed even to the engineer himself, and it is therefore not altogether unprofitable to sit down quietly now and then and consider this matter.

The Army is designed to deal with two kinds of war : a small war and a world war. In the first case it will rely upon existing resources within the Army ; in the second, it will cover and train a striking force to be raised from that portion of the nation's man-power to be allotted to the Army.

It would seem fair to say that the magnitude of the work to be undertaken will be greater in a world war than in a small war. It is also considered accurate to say that whilst in a small war the existing military engineering *personnel* will usually be sufficient for all demands made by the Regular Army, in a world war the majority of the engineer officers will be drawn from civil life.

In a small war the greater proportion of the Regular military engineer officers will be employed in an executive, as opposed to an administrative, capacity, whilst in a world war the situation is likely to be reversed, and we shall find a larger proportion employed as administrators. They will be required to handle the civilian recruited engineers who will be brought in to carry out executive duties.

There is no mystery about the executive side of military engineering to-day.* Consequently, a civilian engineer, as was proved in the years 1914-1918, can soon take his place on the executive side. It is on the administrative side that the necessity for military experience is required.

The military engineer should not be, and humanly cannot be, an expert in every branch of engineering, but this does not imply that there does not exist a very definite profession, having a technique peculiar to war which it is the duty of every engineer cadet and junior officer to master in due course. But the employment of the military engineer during the early years of his service in an executive capacity is only part of his training to arrive at the finished product and, therefore, in the subsequent discussion of this subject, it is not the subaltern or captain who is visualized when referring to the military engineer, but rather the holders of the higher appointments open to the profession.

One of the basic principles on which our Army is prepared in peace and operates in war is that it should rely on civilian resources to the greatest possible extent, not only for man-power and material, but also for its technical experts.† These latter make up the peacetime Army, in its broadest aspect, from and on whose framework the national Army is expanded in a world war.

Just as in peace we require a certain proportion of the nation's man-power in the Army for training, experiment, and as a shield under which the national Army may be trained and developed when a world war arises, so we require to possess in peace certain material which is peculiar to the art of war. In no less degree do we require certain professional experts included in the Army in peace whose attainments are peculiar to war, and it is amongst these that we can number the General Staff and the military engineer, to mention only two around whom this discussion will centre. (Care must

* Probably the term "military engineering" is daily becoming more and more of a misnomer, and some such expression as "the adaptation of engineering practice to military requirements" explains the profession of the military engineer much more faithfully.

† The exceptions to this principle are the man-power, material and technical experts peculiar to the art of war.

be taken not to confuse the professional experts within the Army—the General Staff and the military engineer—with the engineering specialists of detail, the designers. The General Staff are expert soldiers ; in no less degree is the military engineer an expert at his profession as herein defined. The technical specialist is the designer who is expert in *one* only of the following—automobile engines, 6-in. guns, 15-in. guns, chassis design, armour, bridge design, etc., etc.) It has been hinted at the commencement of this article that the functions of the military engineer are not too commonly appreciated, and in fact, as its title suggests, this article is an attempt to elucidate this very point. And so it is considered that the best starting-point will be a brief examination of the influence of engineering on the art of modern warfare.

The late war was remarkable for a number of things, but one of its more outstanding features was the tremendous impetus it gave to scientific development. Recall the advances made in chemistry as evidenced by poison gas, new high explosives, smoke and synthetic oil ; in metallurgy, as demonstrated by the guns evolved, and the increased efficiency of the internal combustion engine, with its far-reaching effect on the aeroplane, mechanical transport, tanks and the greater use of power to increase the output of the individual ; in electricity, as witness the improvement of wireless telegraphy and the “ arrival ” of radio telephony. Whatever the branch of science considered, wonderful achievement and development were recorded, and since it was the urge of war that begat all this progress and development, it should not be a matter for surprise that the Army of to-day stands on the threshold of a new era.

Chemistry, metallurgy and electricity have possibly made the greatest mark on the military machine so far, but we are only at the beginning. Chemistry, poison gas, can so completely and absolutely revolutionize the military machine that the question, “ Are we giving the potentialities of gas sufficient weight in our present policy ? ” must be left undiscussed in this article.

At the present moment, however, it is the fruits of metallurgical research which have made the deepest mark on the Army, for it is this more than anything else which has made possible the development of the internal combustion engine. This prime mover has freed the Army for all time from the limited tractive effort of the horse. It spells to-day increased mobility, and this reacts in numerous directions to re-establish tactical manœuvre, to reduce distance, to conserve physical energy, to provide a greater degree of human comfort and to build up moral. It also provides power—

almost unlimited power—which can be transported even into the battle area, the utilization of which will increase the capacity of the individual man to do work.

Up to the present time the development of the science of electricity has been mainly in the direction of improved communications. That this improvement was required, before the Army attained its new mobility, will not be denied. How much greater will be the responsibility placed upon communications as a result of this new mobility, in order to ensure that the standard of coordination and cooperation does not decline ! Even as we write comes the promise of the transmission of electrical power without the use of wires. To what use will the Army put such an achievement ?

During the course of the war the journalists evolved a series of epithets—the “chemists’ war” blazed forth one day ; then the “gunners’ war,” whilst the “engineers’ war” was used almost to exhaustion point. The journalists may not always be right, but there will be few who will quarrel with the broad but moderate assertion that engineering science is to-day a rapidly increasing influence on the Army.

At the moment, the greatest problem before the Army is what is popularly called “mechanization,” but which is not always defined, as it should be, to mean the utilization of mechanically produced power both to gain increased mobility and to conserve physical energy, or alternatively, to increase individual output. No one is likely to minimize the various problems which, it may reasonably be expected, will be met with in effecting this mechanization, and the several scientific developments pending, which are likely to materially to affect the Army, can be relied upon, in no less degree, to produce a similar number of problems.

The situation is really this. The impetus which the late war gave to science has placed us in possession of a number of tremendously potential developments of the science of mechanical engineering. The potentiality of these developments is so immense that we suddenly find ourselves with a huge accumulation of engineering knowledge requiring assimilation into the technique of war. Hitherto the evolution of the technique of an army has been spread over a period of time measured in centuries. It has been so gradual as almost to escape notice. It has been measured, as it were, by the hour-hand of the clock.

To-day we are faced with something much more in the nature of a definite operation. There is so much new knowledge—it is no longer a gradual process, we have to move with the minute-hand of

the clock. It can no longer be described by the term evolution—it becomes much more nearly a definite military operation of peace.

Let us now discuss the three professions which must cooperate to effect this operation of peace. We have the General Staff and the military engineer, both are peculiar to the Army in peace as in war, and we have the engineering designer, who is invariably outside the Army, but who may spring from either a military or a civilian source.

First of all, then, there is the General Staff, the professional soldiers—the directors, the men responsible for the policy and the framework of the Army, but who are, nevertheless, laymen in the face of engineering science. Now civilian engineering endeavour does not normally aim at producing a weapon of war. Consequently, it is not to be expected that the General Staff can, as it were, go up to the counter of engineering development and pick off the shelf those inventions and ideas which it considers it can utilize for the better prosecution of war. It must be clear to any one that this would be a wasteful process—wasteful of money and wasteful of effort. The man who goes to the counter should be a military engineer. The military engineer has a definite and continuous duty of an operative nature in the Army. That is to say, he has to put through the current and ordinary engineering work of the Army, but he should also have this other highly important, highly skilled function—he should interpret the policy of the General Staff in terms of the developments of the age. It is not the duty nor is it the function of the General Staff to speak the language of the science of engineering. It represents the high priesthood of the art of war.

It will be readily conceded that the necessity for the military engineer acting in this consultative capacity did not exist for some years before the war. When fortification bulked largely in Army affairs the military engineer was definitely established and his profession was duly acknowledged. Since the days of fortification there was a hiatus, nothing arose on a predominant enough scale to take the place of fortification. But now—overnight—mechanical engineering has appeared and the rôle of the military engineer has suddenly become patent to all. Perhaps the day after to-morrow it may be that the military engineer may require to possess a chemical bias, just as to-day he requires to have a mechanical leaning. And thus arises the urgent necessity for a re-orientation of view and a recognition of the necessity for utilizing the technical abilities of the military engineer in the highest councils of the Army.

The military engineer should be required to appreciate and to analyse the purely military requirements as enunciated by the General

Staff, he should then weigh them against engineering development as it stands at the moment, he should advise the General Staff of the limitation which the current stage of development may impose on its stated requirements, and, finally, having reached a compromise with the General Staff, he should be the agent to present to the particular engineering specialist a picture which his engineering knowledge tells him is feasible.

The engineering specialist is the third party in the triumvirate now under consideration, and it is essential to realize clearly his functions and his limitations. No portion of the Army subject to military law is trained with a definite view to the production of engineering specialists in those branches of military maintenance which fall under the heads of research and design except as mentioned below. The cadre Army of peace, no less than the national Army, cannot train from amongst its officer *personnel* the automobile designer, the bridge designer, the metallurgist, the chemist or the electrical designer, whose services it nevertheless requires. So far as possible the Army adapts and utilizes civilian design and practice ; over and above this, the requirements pertaining solely to warfare must be obtained by the subsidization of certain civilians, together with a number of officers drawn from all corps and arms who display especial aptitude and are mentally fitted for this specialized work. For example, since the gun is peculiar to war, the Army trains a limited number of artillery officers as gun designers. Too much stress, therefore, cannot be laid on the difference between the two professions of engineer designer, whatever the particular branch, and the military engineer. There is much ignorance on this point amongst the laity, and it is as well that it should be clearly recognized that the designer is the highest degree of specialist in one branch of engineering only, and that *this is precisely the last quality required of the military engineer.*

There is, however, little doubt that the misunderstanding is largely due to the fact that it has become less and less the habit of mind to look upon military engineering as a clearly defined profession. The mechanical engineering maintenance work of the Army until 1914 consisted mainly of artillery repair and maintenance, and was carried for by a corps separate from the accepted military engineers.

The appearance of further mechanical work in the shape of mechanical transport saw a third corps undertake maintenance work of a mechanical nature. Whilst this latter development was doubtless largely done under the stress of war conditions, the fact remains that it is this splitting up of the mechanical engineering work of the

Army among several corps, coupled with the absence of any coordination of the control of engineering design and research (not the actual design and research) under one military engineer, trained as such, which has created the anomalous position, greatly aggravated on the appearance of wholesale mechanization, that to-day the professional soldier has no one professional military engineer to advise him on modern engineering development as a whole. Now it is here contended that this is the true function of the military engineer. He must be the consultant, the counterpart of the general medical practitioner, the diagnoser, the appraiser. He must speak the language both of the General Staff and of the civilian or military expert designer.

Whilst the existing organization within the War Office provides certain branches which are charged with the duty of interpreting as between the General Staff and the particular section of engineering design with which they deal, these branches are not, as an accepted rule, staffed by military engineers, although they carry out work which is essentially military engineering. Staffing these branches in this manner is bound to result in design and research being pursued along restricted channels, with consequent waste and limited results. The staff of these branches, from the director down, should be chosen from amongst the most highly trained military engineers available for each grade, versed in all branches of engineering science, and practised in the application of their knowledge, so that they can appraise to the full the significance and possibilities of inventions and discoveries in respect of the particular duties with which they are charged. Some idea of the type of work expected of these branches may be gathered from a hypothetical consideration of tank design. The General Staff desires a weapon to combat the machine gun and stipulates that it shall be capable of travelling 40 m.p.h. across country, carrying an armament of 4 machine guns and one 3 pr. gun, and armour, which is proof against 3 pr. shell. Coordinative work of this type is essentially the military engineer's. He, as a combatant officer, can appreciate the niceties of the purely military proposition which he is directed to solve; he knows the users' requirements and appreciates the natural obstacles met in the field. On the other hand, he knows in general terms the ratio of power to bulk of the internal combustion engine, as well as its inherent limitations; he realizes the painfully low efficiency of the track, and, consequently, he can say to the General Staff, without hesitation, that to produce such a tank, until the track can be improved, is, at the moment, impossible. The low efficiency of the track, and the

engine in its present stage of evolution, make the carrying of such a load of armour and armament at such a speed impossible unless a 4,000 h.p. engine is used. This will reduce the space available within the vehicle by some 200 cubic feet and result in it being useless as a fighting machine. He may say we can give you an unarmoured vehicle to move across country at 20 m.p.h. with no room in which to fight four weapons, or we can give you a 3 pr. proof vehicle to move at 4 m.p.h., but, if a balance between armour and speed and fighting ability is desired, then the tank will be 303 inch proof and travel 15 miles per hour across country.

‡ It is not for the layman to appreciate, for example, the inherent inefficiency of the track as opposed to the natural efficiency of the wheel; it is for the military engineer to point out the necessity for further research on the track before expending further money on a complete tank. The military engineer is also in the best position to report to the General Staff on such a subject as the commercial progress of the utilization of power to increase the output of the individual employed on field engineering. He will be technically able to advise that instead of doubling the number of men in a field company, the possession of a prime mover within the unit, operating the requisite tools, will enable each sapper to double his output when dealing with the multifarious requirements of fortification, demolition and obstacles in the field.

Again, in the criticism of what may be termed erectable equipment, he will play his part. It will be his responsibility to explain to the civilian designer those general military requirements which influence bridge design. He will show that loose bolts, odd pins on chains, long lengths of vulnerable screw thread, are so much waste of time, labour and money, if incorporated into a military structure. For the expert does not necessarily appreciate that simplicity of design is demanded of a structure which has to be assembled and erected by night under fire, and only the military engineer can explain this efficiently.

But there is a still wider aspect of this linking of civilian and military experts by several War Office branches which, it is contended, should be staffed by military engineers. The military engineer is peculiarly fitted to fill the higher rôle of coordinating all these branches. In such a position a military engineer is technically fitted to realize, so soon as he sees the General Staff using fighting vehicles in the forefront of the attack and in support of reconnaissance troops, that heavy assault bridges will be required, and he will be in the best position to direct the bridge designers on to this problem.

Every new device, every single application of a new weapon, has its reaction on a number of other devices, weapons and previously existing conditions. If you produce a highly efficient anti-tank gun, you influence tank design, you may require a faster or a more highly armoured tank. If you produce a heavier tank, you need a stronger bridge. If you can successfully utilize the anti-tank mine, the calls on anti-tank gunnery are lessened. If by mechanical means your field engineers can remove woods overnight, the demands on your tanks are decreased. If by means of a more efficient mounting you can improve tank gunnery, you may require to increase the armour on your anti-tank gun or your self-propelled 18-pounder gun. The anti-tank gun may make the tank a mere death wagon, but the successful control of smoke may revivify the tank and make it once more a practical proposition.

And so it is that whilst reconciling the desire for a heavy tank with the necessity for progress in bridge design in order that a heavy, and, at the same time, quickly erectable bridge may be available, the military engineer must also co-relate the progress in these two branches with the current stage of evolution of obstacle construction, anti-tank gun development, with smoke and with gas. In order to attain the greatest all-round efficiency of the Army, the fighting machines must be evolved as a coordinated whole; otherwise, it is not difficult to visualize that at some future date the advanced evolution of one part of the military machine may be nullified by lack of progress on some other part, or alternatively, that one part of the machine may be advanced along a special line, and be at total variance with the most likely avenue of advancement of some other part. It is undoubtedly in this highest position of all that the technical, consultative advice of the military engineer will tend to the more rapid production of what the Army really needs in the way of engines of war.

Not only will such coordination produce the new Army in the most efficient form in the shortest time, but much money will be saved. The military engineer can lay down the lines along which development can most economically proceed. Instead of building the complete experimental unit, he can show that economy lies rather in research and experiment on the weak link of that unit, until such an appreciable advance has been achieved that it is justifiable to include the improvement in the standard unit of which the Army is in possession.

But make no mistake of this fact—the military engineer who can explain the military limitations which, of necessity, must be super-

imposed on the pure engineering design, could not himself produce the detailed design for the vehicle or the bridge or the gun, or whatever it may be. It is not his business, he is required to stand back, and get a much larger view of the situation. He does not deal in $3/16$ inch here and 5 mm. there. He simply writes the specification. The foregoing merely suggests some of the functions which should belong to the military engineer, more particularly on the mechanical engineering side.

There may be some who will argue that the production of such a man as the military engineer has been described to be, is not possible—but it is only a question of degree. Just as the C.I.G.S. interprets the arms of the Army to a lay Cabinet, without himself being an expert in every arm of the Service, so it is necessary to-day to have a military engineer placed in such a position that he is charged with interpreting to the General Staff the numerous specializing experts of the engineering profession in terms of the policy of that Staff.

If the military engineer's training is right, there is no shadow of doubt that such men can be produced and are in fact available to-day. It should be realized that this is a professional affair. The military engineer should stand apart as the coordinator of a number of experts in different branches of engineering, for just as the commander cannot win his battle if he is for ever shooting with the infantry or ranging with his gunners, in similar degree he cannot afford to entangle himself with his many engineering experts.

Now it has been shown that military engineering is a distinct profession, requiring distinct qualifications from its professors. For many years now much money has been invested in the education and theoretical training of one particular corps, the Corps of Royal Engineers. This training comprises the broadest possible theoretical engineering education at Cambridge University; a period of applied practical training in military material at the School of Military Engineering; a period of wide and varied practical apprenticeship with civilian mechanical and electrical manufacturers and consultants; experience in combatant duties and cooperation with the other arms of the Army through its field companies. On foreign service its officers gain experience under every conceivable climate and set of conditions as mechanical civil, electrical and railway engineers, and as surveyors. As a result of the possibilities offered by this unique training and experience, this Corps alone possesses the officers with the necessary qualifications to fulfil the functions to be required of the military engineers of the Army.

In view of the large sums invested in the Royal Engineer's education, it is not unnatural that the General Staff—the professional soldier—should require to see a definite return for all this investment, and no one realizes better than the Corps of Royal Engineers that its members are not giving all they could to the common cause—the efficiency of the Army. But unless he is invested with the responsibility, the Royal Engineer cannot produce the desired results. He is merely one of the still small voices crying in the wilderness, hoping against hope that one day he will be utilized as he should be.

It is not a piece of professional jealousy if the military engineer points out that the gunnery expert, the automobile expert, or any other expert, cannot, on those qualifications alone, fulfill the professional requirements of a military engineer. We have only to turn to recent history to see how the military engineer has fulfilled his true function in spite of lack of official recognition. It was his sound military training, coupled with his knowledge of engineering, which enabled General Sir E. Swinton (late R.E.) to appreciate the situation on the Western Front in 1914 and to write a specification for an engine of war—the tank—which successfully dealt with the hidden machine gun. More recently still, it was Major Martel, R.E., who, appreciating the need for individual mobility above that possible with limited human powers, evolved the tankette, and demonstrated the way in which the internal combustion engine might be utilized to gain increased mobility for the individual.

Recognition of military engineering as a profession may be hailed as something new ; in point of fact, it is more in the nature of a revival, since it is only of recent years that the influence of engineering on warfare has once again accumulated sufficiently to be obvious to the layman.

All that the Royal Engineer asks is to be officially charged with duties which have been usurped by either non-technical corps, or by specializing experts, and he will produce the results and pay the dividend on the capital invested in his education.

It may then be asked, assuming that he is charged with the coordination of the experts, why should he also require to be charged with the maintenance of the machines of war ? The reasons are two in number. The military engineer requires in peace all the practical experience and training that he can get. Every one realizes the difficulty of finding practical training economically for the Royal Engineers in time of peace. Why then bestow all the highly theoretical training on this one corps, and divide the practical training afforded by the maintenance of the engines of war among two other corps ? The

other reason is financial. If mechanical maintenance is to be carried out by the R.A.S.C. for the supply lorries and by the R.A.O.C. for the guns and so-called mechanized vehicles, it will inevitably entail duplication and overlapping. Mechanical maintenance, whether of 4-wheelers, 6-wheelers, half-track or full-track vehicles, or of guns, can all be carried out under one roof in one mechanical engineering workshop. The materials and processes of manufacture and maintenance are in all cases the same.

In the next few years we shall undoubtedly see the R.E. in possession of a great deal of mechanical plant for use by their field and army troops companies. Are they also to open their own workshops for the repair of these engines? Are there to be three separate sets of mechanical engineering workshops in each divisional, corps and army area?

To place the mechanical maintenance under one corps will save machine tools, buildings and power. It will economize in labour and supervision. It will economize in the numbers of boys' technical training schools required. Can the Army, on its present reduced Votes, afford to neglect the consummation of these far-reaching economies?

In conclusion, it must be realized that the situation has changed materially since 1914. There exists to-day, owing to the ever-increasing importance of engineering within the military machine, a definite rôle for the military engineer as the coordinator of the many specialized branches of engineering. The Army has already complained that it is not receiving the benefits which it has a right to expect from the costly education of the officers of the Corps of Royal Engineers. This Corps is anxious to shoulder the responsibilities for which it has already been trained, and only asks to be definitely charged with them. These responsibilities mean—within the War Office—a coordination of the many engineering experts who work outside the War Office, and in the field or in the commands, responsibility for all mechanical maintenance, in addition to the responsibilities already possessed in respect of field engineering, railways and survey.

By such a re-allocation of responsibility the Army will draw dividends on the capital invested in the education of the Corps of Royal Engineers; economy will be effected in expenditure, time and effort; and the General Staff will receive unbiased engineering advice, commensurate with its needs, which is of such vital importance to-day when the foundation of a mechanized Army is being laid.

NOTES ON INTELLIGENCE TRAINING DURING MANŒUVRES

BY MAJOR B. C. DENING, M.C., R.E., *p.s.c.*

IN most Commands during the past training season endeavour has been made to exercise the Intelligence staffs in formations in the duties they would be called upon to perform in war. The difficulties which have been experienced in providing sufficient and realistic practice have led the writer to put forward the following notes.

The first difficulty facing those whose task it is to organize instruction in Intelligence has been that attributable to the size and nature of the forces engaged.

The occasions upon which attempts have been made to utilize Intelligence staffs have been either when a brigade has been opposed to a like force or when a division has been in conflict with a skeleton enemy. Bad weather prevented the carrying out of larger, inter-divisional manœuvres. When the enemy consists only of a skeleton, or in close country, of a force as large as a brigade, there is little movement to be seen, either from the air or the ground. Further, in manœuvres of this kind the numbers are so few that few identifications can be obtained. In addition, the composition of the enemy is generally so well known before units leave camp that little interest is taken in identifying the opposition.

Another difficulty is that operations generally are of very short duration. While in war the chief results are obtained from an Intelligence service by examining the cumulative effect of little pieces of information obtained over a space of days or even weeks, in manœuvres conclusions have to be drawn from the events of a period which rarely exceeds twenty-four hours. What is worse, during spells of divisional training, entirely fresh schemes are issued at frequent intervals (i.e. three in one week), with the result that staffs have not only to absorb fresh situations, but have also to

clear their minds of all their previous mental efforts—the exact reverse of the procedure in war.

What should be aimed at in an exercise for any staff is a representation of a state of affairs such as is actually likely to occur in war, at a time when the staff is subjected to the greatest strain. In order to obtain this kind of training for Intelligence staffs, it is clear that the situations as developed in manoeuvres in brigade and divisional schemes do not suffice. The information normally procurable during the period of the scheme offers insufficient scope.

The Intelligence staff of any unit or formation, whether of a battalion, brigade, division or larger formation, is expected :

(a) To have recorded in handy form all information obtained in the past about that portion of the enemy which the said battalion, brigade, division, etc., is likely to encounter.

(b) To present at any given moment to the commander of the unit or formation the situation at that moment in a readily appreciable shape.

(c) To give an indication of the future intentions of the enemy from recorded facts.

(d) To disseminate to all concerned information as received.

It should be our endeavour to give to Intelligence staffs the opportunity to carry out all these functions in the training season.

In the Great War, under static and semi-mobile conditions, duty (a) above was carried out in divisions and lower organizations by maintaining two recording instruments, the Intelligence map and the daily summary of information. The map consisted of a sheet, on as large a scale as was procurable, fixed on a board, upon which all reliable information about the enemy on the battalion, brigade, etc., front was plotted and added to day by day, or during a battle from hour to hour.

The daily Intelligence summary contained a list of the pieces of information obtained in the twenty-four hours, with comments as to the source of Intelligence of certain items and any conclusions drawn. In formations higher than divisions the same system was adopted, though there might be several maps and summaries of greater length than at lower headquarters.

Duty (b) was most satisfactorily performed also by means of the Intelligence map. A clear map could always present the facts to the commander far more effectively than a written report or a personal explanation.

Duty (c) was, in periods of active operations, often carried out by a verbal report to the commander as and when the facts justified such a course. At the same time the daily Intelligence summary contained any general conclusions arrived at.

Dissemination of information was effected either, when the facts warranted, immediately, by the quickest means available, or once a day, through the agency of the Intelligence summary.

The part, therefore, that the Intelligence map and the daily summary play in the duties of any Intelligence staff is very apparent. It is in the handling of these, then, that in peace such staffs should, amongst other duties, be practised. The problem is how to create situations in which staffs can employ these maps and summaries.

Touching first upon the question of the duration of any one scheme, it is desirable that, so far as the Intelligence staffs are concerned, the scheme should be started at a period considerably in advance of the point at which troops move and commence operations, for such would be the case in war. During this earlier period, the commanders might be artificially provided by directors with continual items of intelligence, whether from supposed aviators, flank formations, prisoners, intercepted wireless or other sources which would actually be in use in war. This would enable staffs to frame their Intelligence maps and to issue introductory summaries of information received to all concerned. Care and imagination would need to be exercised by the staff of directors to ensure that the intelligence as received painted the picture to fit in with the events as desired by the director upon the day of operations.

During the day or days of actual operations, every effort should be made to give to the Intelligence staffs the information which they would obtain in operations of that type in war. In order to effect this, brigades and divisions should first ensure that all sources of information normally at their command were utilized and tapped. Such are reports from the front line troops, Artillery F.O.O.s, mounted troops if affiliated, close reconnaissance machines and signal wireless sets intercepting the enemy's messages. In addition, where the country is suitable, brigades and divisions might profitably employ an observation group placed upon high ground to a flank, whence events seen by telescope could be signalled. Under the really open conditions sometimes obtaining in schemes, officer despatch riders and armoured car patrols provide additional sources of information. If formations were to carry out these recommendations, almost a sufficiency of information might be forthcoming,

provided weather and visibility conditions were good, to give real practice to Intelligence staffs.*

In cases where the intelligence coming in appears likely to prove inadequate, the director can again assist matters by supplementing the actual messages received with a number of additional messages. Such messages, while not throwing the commanders of the fighting forces off the course which they are intended to pursue, will supply the Intelligence officers with the work they needed.

A point to be noted is that while divisional Intelligence staffs may possibly obtain sufficient messages, battalions and brigades will rarely do so, and it is thus to the forward headquarters that artificial news requires to be supplied in order to exercise the whole machine.

One feature of the information as obtained from exercises actually carried out is the absence of the normal identifications of the enemy which form such an important part of forward area intelligence work in war. In large-scale operations the accuracy and speed with which front line troops can identify opposing forces obviously has a vital bearing upon the appreciation of the situation by the Commander-in-Chief. In France, late in 1918, troops had become so well trained in the routine of securing and sending back identifications that on the morning of any big attack, within a few hours, G.H.Q. had obtained the whereabouts of a very large proportion of German divisions. In open warfare the locating of the main formations of the enemy is still more indispensable to successful strategy and in the early phases of the next war it is desirable that our front line forces should be fully trained in the art of securing identifications and sending back the information quickly.

In war, identifications are obtained either from numerals or letters upon buttons and shoulder straps, from papers and correspondence carried, from identity discs, or by interrogation of prisoners. On manœuvres, some effort should be made to supply these sources of information.

* During divisional operations this autumn the writer observed that the following number of messages were received in a battle between a division and a skeleton enemy of 5 battalions between 14.00 hrs. and 20.00 hrs. on the day of contact—

From cavalry squadron	5
„ officer D.R. patrols sent out on flank	4
„ divisional observation group with W/T tender	12
„ a close reconnaissance machines	13
„ " A " brigade headquarters	9
„ " B " brigade headquarters (not engaged until 20.00 hrs.)	nil
Total	43

Greater practice might be obtained by issuing, at the commencement of the training season, a fairly comprehensive order of battle of, say, the "Red" Army and the "Blue" Army, to be used throughout the year. In framing schemes, the narrative could fit in the forces to be exercised as portions of these two armies of known composition. Such procedure would assist directors in supplying the artificial messages already mentioned. Further, all men of the two sides engaged in schemes might be supplied with identifications to be handed over when captured by the opposing side. In this way staffs would become accustomed to the routine of procuring and transmitting intelligence of this type.

A practical difficulty is to be met with in familiarizing staffs in the use of the Intelligence map—the largest-scale map as supplied for training is the one-inch. Upon a one-inch sheet it is impossible to enter much detailed information in writing, and a system of pins and coloured flags is not recommended, for it lacks permanency and can be read easily by the user and no one else. It becomes necessary, therefore, to make an enlargement of the one-inch map to a scale of either two or three inches to the mile, depending upon the extent of ground likely to be covered by the troops once operations commence. The drawing of such an enlargement is a considerable labour and on peace establishments not even divisional headquarters is allowed a draughtsman. There is nothing for it, therefore, but for the Intelligence officer concerned to get to work and to prepare an enlargement before each battle. In order partially to reduce the work involved, it may be remarked that it is unnecessary (in fact undesirable) to show more details in the enlargement than are necessary for a stranger to pick up the relative position of the pieces of information put later on to the map. The necessity for the preparation of such an enlargement is an additional reason for communicating the earlier narrative of a scheme well beforehand to the formations concerned.

A last point to be noted in the exercise of Intelligence officers is that great care should be taken not to utilize such *personnel* during operations on duties which are not normal. For instance, it is unwise to send out the brigade intelligence officer on a front line patrol which will prevent his services being directly available to his commander at a most important period; also it is inadvisable for the divisional Intelligence officer to be given lengthy operation tasks in addition to his own.

“KILLING NO MURDER”*

CORRESPONDENCE WITH THE EDITORS

(1)

GENTLEMEN,

Your editorial, Professor Spenser Wilkinson's article, and your review constitute a triple cross-examination of certain aspects of my book, "The Remaking of Modern Armies," which it would be discourteous to ignore. Indeed, they compel an answer—all the more because in them abuse is not made a substitute for argument. Indeed, if I may be permitted, I would congratulate you on their good taste in discriminating between the language traditionally permissible in criticizing, on the one hand, a collective policy or body, and, on the other, a named individual. This discrimination is too often unobserved in military controversy—in recent months we have had examples in certain published diaries and, again, in a book wherein faulty history and logic were camouflaged by such "personal" vulgarities as calling Mr. Churchill a "damp squib."

In contrast, I recognize that your editorial—like the other articles—is not only "fair comment" but, on the whole, a fair commentary. It does, however, convey to the reader that my theme is a one-sided refutation of battle as a means of victory, whereas it is rather an argument to remedy the lopsidedness which has arisen through over-emphasis on battle as the *all-important* means to victory. My considered summing up was that, even with the new potentialities of the air weapon, "It may prove impossible to reach the moral objective without battle, but the positive and negative examples from history serve to show that, even so, the best way to bring the enemy's armed forces to battle under conditions favourable to oneself is by striking at the moral objective. . . ."

A further unintentional misinterpretation occurs when you say

* See "Killing no Murder: An Examination of Some New Theories of War," by Spenser Wilkinson, late Chichele Professor of Military History in the University of Oxford, *Army Quarterly*, October, 1927.

that " it is somewhat disquieting to find that an English writer should countenance such a wholesale system of murder " as air attacks on unfortified towns. A careful analysis of my argument would show that it is divided into separate and distinct compartments. The first is a statement of the effects of air attack, with an illustration of what would happen to us, not an advocacy that we should do it to a foe. The second is a survey of the military, economic and ethical objections to such a method. *Advocacy* is reserved for the third, and it is then an advocacy that in our application of such a method we should use non-lethal gases instead of high explosive, following an argument that the infliction of death and destruction recoils on one's own head. It appears to my poor sense of logic that this is an argument not for, but against " the indiscriminate slaughter of civilians."

I turn to Professor Spencer Wilkinson's article, the title of which, I confess, gives me the impression that it was perhaps chosen for its effect rather than for its applicability. There is much in the article with which I agree—it could not be otherwise where the author is perhaps the profoundest of all contemporary students of military history. But I must challenge him on certain points.

He suggests that the excessive losses and duration of the war might be attributed, " with equal reason," to our failure to concentrate sufficiently on the Western Front. I suggest that this reasoning arises from an undue mental concentration on the British effort. It overlooks the fact that the Germans at Ypres in Oct.—Nov. 1914, and the French in their 1915 offensives brought to bear a greater superiority of strength over the defenders than we could perhaps ever have hoped for, and yet failed signally to break the resisting power of modern defence. I feel that we did, and do, inexcusably disregard these lessons of 1915—which attested the impregnability of modern defence in sectors where there is a definite expectation of attack. In the light of French and German experience it is difficult to find any warrant for the belief that a few or even a considerable number of extra infantry divisions would have made any material difference to our results.

Secondly, I prefer the verdict in the " Official History of the War," Vol. III, and reinforced by Falkenhayn's admissions, on the potentialities of the Dardanelles *conception*—as distinct from the half-hearted method—to that implied by Professor Spenser Wilkinson. To this question I revert, *indirectly*, later.

Professor Wilkinson does not interpret me quite fairly when he says that I ascribe the military doctrine of 1914-1918 to Clausewitz.

I endeavoured to make it clear that I ascribed it to his disciples, but held him responsible for giving a dangerous bias to his wide survey of the objects of war—by excessive stress on the destruction of the enemy's armed forces as the primary and paramount step towards victory.

That this destruction came to be visualized in the World War as a destruction of the enemy's troops, rather than the dislocation of his military organism, can be proved by reference to the memoirs and letters of those who directed our strategy—with their constant emphasis upon "killing Germans." Compared with this purpose there was small concentration of thought upon the far deeper effects of paralysing the enemy's brain, physically or psychologically, nerve system and arteries.

Professor Wilkinson then disputes my statement that the German Army's objective in 1870 was Paris, not the French Army. If he will refer to the war diaries of Frederick III he will find clear evidence that Paris was the objective, and that the encirclement of the French at Sedan came about as an almost casually decided incident *en route*.

Next, he argues that any attempt of a tank force to strike at the command and communication centres in the enemy's rear "will hardly be practicable in the next war, because" it "will immediately be met by the enemy's tanks. . . ." I would reply that the more mobile an instrument the greater is its power of evasion, as has been proved by cavalry in the remoter past and by aircraft in the recent past.

Professor Wilkinson, basing his faith on the last war, doubts the decisive effect of an air blow, "jumping" the army, against the moral objective. It seems to me perilous reasoning to base such a judgment on the puny attempts made in a war where the mind and energy of the warring powers were concentrated on killing the enemy's soldiers, and where the bulk of the adolescent air forces were utilized as mere auxiliaries to this task. Even as it was, Professor Wilkinson might feel less confidence if he had examined the statistics of the drop in the output of munition factories on the nights of air raid warnings, or had seen the population of a great town such as Hull, for example, stream out nightly into the fields.

But I maintain that the effect of a general strike—with unrestrained sabotage—or an earthquake is a better guide to the dislocation and paralysis which would be produced by air blows against the docks, railways and munition centres of a country. All these

might at the outset be proclaimed “ out of bounds ” to civilians in the enemy country, as justifiable military objectives. At the same time Professor Wilkinson’s claim for the immunity of civilians strikes me as discordant with his emphasis on the fact that modern war is carried on by the whole energy and resources of a nation.

I endorse, and have endorsed in my book, his care for the maintenance of ethical standards, but I would remind him that faulty logic has caused as much suffering as deliberate brutality. If one could discard national bias and acquire an historical point of view, there might appear little difference between our blockade and the German submarine campaign, except that between a lingering and a quick death, or that in the one case non-combatants could avoid going on the menaced ships, whereas in the other they could not leave the blockaded country. I should be happy if I could feel that the sum of suffering to women and children caused by the blockade was less than that caused by the German submarine and air attacks. I agree with Professor Wilkinson that a sense of righteous action is vital to the moral of the soldier and sailor, but both the sense and the moral are inspired more by faith than by logic, and most of the atrocities in history have been carried out by men whose moral was fortified by their conviction of acting righteously—witness the religious wars.

From the article I pass to the review. Your reviewer asks when I will produce a comprehensive and systematic statement of my proposals for the mechanized British Army of the future. In the present fluctuating state of technical design it is more rational to deal with the needs of the moment and to give direction signs for the future than to draft a rigidly detailed plan—until we seriously begin the conversion of our present machine-gun fodder into armoured units. Then, such a book will be justified. Whether it can be undertaken is another matter, for a still more pertinent answer to your reviewer’s question is—“ When the British officer acquires the book-buying habit.” For his reputation is that of being one of the worst book-buying classes even in a country which has a notoriously poor demand for serious books. At present hardly any publisher can afford to bring out a book appealing only to the technical military public. And if Clausewitz had been a living Englishman his work “ On War ” would either have remained unwritten or his publisher would have filed his petition in bankruptcy. The editor of a military review should have a keen appreciation of this reasoning. It is true that in consequence the military reviews become the channel of publishing compressed theses which

would otherwise be expounded within the wide spacious dimensions of a book, but the editor may well feel that quality of matter is an inadequate consolation for paucity of circulation.

Here ends my reply to the questions raised in your editorial, article and review, but I would fain close on a more constructive note. For destruction is only of value as a preparation of the ground for fresh construction. Professor Wilkinson's challenge is a spur to hasten the elaboration and fuller explanations of certain aspects of my theory of war. From the fruits of my humble efforts to explore the field of military history certain deductions have gradually ripened, and some at least have now reached a stage where they may be crystallized into thesis form. Among these is the theory of what may be termed "The Strategy of Indirect Approach." More and more clearly has the fact emerged that a direct approach to the object or objective along the "line of natural expectation" has ever tended to negative results. The reason being that the strength of an enemy country or force lies far less in its numbers or resources than in its stability or equilibrium—of control, moral and supply. The former are but the flesh covering the framework of bones and ligaments. To move along the "line of natural expectation" is to consolidate the enemy's equilibrium, and by stiffening it to augment its resisting power.

In war as in wrestling, the attempt to throw the opponent without loosening his foothold and balance can only result in self-exhaustion, increasing in disproportionate ratio to the effective strain put on him. Victory by such a method can only be possible through the advantage of an enormous margin of superior strength, and even so lacks decisiveness. It is a fundamental violation of the law of economy of force.

In contrast, the decisive victories in military history have come from the strategy of indirect approach, wherein the dislocation of the enemy's moral, mental or material balance is the vital prelude to an attempt at his overthrow. The strategy of indirect approach is, indeed, the highest and widest fulfilment of the principle of surprise.

Among a host of examples the strategy of Scipio's campaign in Africa, Sulla's strategy in Italy, Jenghiz Khan's against the Kharismian Empire, Sabutai's against Hungary, Wallenstein's in 1632, Marlborough's on the Danube, Bonaparte's which led up to Lodi, Grant's Vicksburg campaign, and Sherman's unduly neglected but decisive "march to the sea" and thence to Virginia, may be quoted as illustrative of the varied forms of the "indirect approach."

For this theory is inclusive of but wider than the *manœuvre sur les derrières* which that great student General Camon established as the key-method of Napoleon in his conduct of operations. Where the one is concerned primarily with the logistical moves, the other seeks to probe deeper to the psychological foundations and in so doing finds, even in the sphere of operations, an underlying connection with many strategical plans which have no outward resemblance to a *manœuvre sur les derrières*—but are none the less definitely vital examples of the “ strategy of indirect approach.” This brief explanation must for the moment suffice to indicate the tenor of the thesis, which is now “ on the stocks ” and will, I hope, be launched in a few months.

Yours faithfully,

B. H. LIDDELL-HART.

12th November, 1927.

(2)

GENTLEMEN,

What I have written I have written. I am sorry that Captain Liddell-Hart missed the point. I was anxious to persuade him that he is, like myself, a disciple of the orthodox school. In arguing with me about tanks and aeroplanes he is wasting his time, seeing that I disclaimed in these matters such technical knowledge as would justify an independent opinion. They are for the new generation of which Captain Liddell-Hart is a leader, and not for the older crew of which Lord Sydenham and I are perhaps the only survivors.

Strategy is inseparable from tactics, and tactics, as it consists in the judicious employment of weapons which vary from age to age, follows, often too slowly, the development of armament, that is of the mechanical arts and the sciences. Each age, each kind of armament, has its typical or ideal general. Alexander was the general of cavalry and the phalanx ; Cæsar of the javelin and the short sword ; the Black Prince of the long-bow ; Napoleon of the flint-lock and the smooth-bore gun. To-day the flint-lock and the smooth-bore gun are as dead as the javelin and the long-bow. They and the tactics appropriate to them have passed into history.

But there are elements in war that do not change. They are the men and the spirit and the mind of the great commanders. The great commander has a great heart, a strong will and a clear head. Alexander, Hannibal, Scipio, Cæsar, Marlborough, Wellington and

Napoleon had received, or given themselves, an intellectual training which placed them on a level with the best minds of their time. They were not only generals but statesmen. The commanding mind is just as necessary as the commanding will, and perhaps was lacking in the conduct of some of the armies during the late war.

If we try to find the distinguishing feature which is common to all the great commanders, it seems to be that each of them thought his plans to the end. Each has considered, with regard to every blow he thinks of striking, what will be its effect on the heart and mind of the enemy, of the hostile general, of his troops, his government and his people. Napoleon said : "*A la guerre tout est moral, et le moral et l'opinion font plus de la moitié de la réalité.*" Moreover, he explained clearly what he meant. "*Achille était fils d'une déesse et d'un mortel : c'est l'image du génie de la guerre ; la partie divine, c'est tout ce qui dérive des considérations morales, du caractère, du talent, de l'intérêt de votre adversaire, de l'opinion, de l'esprit du soldat, qui est fort et vainqueur, faible et battu, selon qu'il croit l'être ; la partie terrestre, ce sont les armes, les retranchements, les positions, les ordres de bataille, tout ce qui tient à la combinaison des choses matérielles.*"

What advance upon Napoleon is conveyed by Captain Liddell-Hart's expression "the moral objective" ?

My only reason for touching the subject was, and is, my fear that Captain Liddell-Hart's vigorous writing may lead the junior officers of to-day, who will be the generals of to-morrow, to neglect that military history which he himself assiduously cultivates.

Yours faithfully,

SPENSER WILKINSON.

1st December, 1927.

NOTES ON FOREIGN WAR BOOKS

ANOTHER volume of the French Official History, dealing with June and July, 1918, is reviewed separately. The most interesting book of the quarter is H. von Hentig's criticism of the German higher leading, placed at the beginning of these notes. The book of Colonel Œhmichen of General Joffre's Staff, on the efforts to obtain unity of command, is of great importance and authority, and General Palat's gives a very complete account of France's troubles in 1917. The Belgian Historical Section begins an account of the Belgian colonial operations in the war, and the Italian General Staff have issued the first volume of their official history.

STRATEGY

Psychologische Strategie des Grossen Krieges (Psychological Strategy of the Great War), by Hans von Hentig (Heidelberg, Winter, 5 marks), is perhaps the most damaging attack made on the German higher leading, political and military, that has yet appeared. It is of such interest that it is here reviewed at some length.

The author, who is a jurist, but served as an officer in the war, has published interesting studies on Machiavelli, Robespierre and Fouché; he appears to have read a large number of English books on the war, and, at any rate, exhibits considerable power of original thought. He is of opinion that all that hitherto has been written in Germany amounts to the absurdity that the generals assert that without the politicians they would have won the war, and the politicians argue that with other generals they would not have lost the war.

Germany's first defeat was that there was a two-front war. It was "the misbegotten child of faulty politics." Yet the General Staff made no protest; indeed, was full of complacency that it was to conduct a war on two fronts. That both the politicians and the soldiers laboured to secure an ally, and to ensure a coalition war, was rank stupidity. Germany should have manoeuvred to fight

France or Russia alone ; or, if she had to take on both, then to make them attack her, and thus bear the moral guilt in the eyes of the world. Russia was England's real enemy and Germany's most essential ally. The Austrian Alliance provided for Germany a weak friend and made Russia hostile. Further, by persistent expansion of the German fleet, Great Britain was annoyed and irritated. The idea of adding Italy and Rumania to Germany's allies was merely "a dose of morphia" for the German people. How absurd it was to imagine that they would fight on Germany's side was demonstrated by events.

Diplomacy having ensured that Germany had two strong enemies, it should have endeavoured to engage them separately as Austria and France were engaged, the former in 1866, and the latter in 1870. A Russo-British war should have been engineered [Germany did try this, it has been said, at the time of the Dogger Bank incident], or Japan engaged to keep Russia quiet [as she did for a time]. Far from manœuvring to this end, after Russia's defeat in Manchuria in 1904-1905, Germany went out of her way to insult her.

Given a two-front war, Germany should have stood on the defensive. There was no hope whatever of beating France in a few weeks ; 1870-1871, when France was unprepared for war, had shown that ; even the National Armies, hastily raised by Gambetta, and without guns, had proved formidable foes. Moltke, the elder, was opposed to an attack on France, and preferred a campaign against Russia. In any case, the German Armies should only have gone a certain distance into France, and then stopped and offered peace. On the Eastern Front, trust should have been put in fortifications, with a mobile force in a central position. A defensive war without means of victory would have had a healthy psychological effect on the German people.

All Germans, however, believed in the invincible power of their country, and nothing would satisfy the nation but attack everywhere. Not content with having a two-front war and two formidable foes, Germany's one ally proceeded to begin a two-front war of her own, and bring in a new enemy, Serbia ; whilst the German General Staff added two more enemies in Belgium and Great Britain ; and, had not Moltke "watered down" the Schlieffen plan, there would have been a third, Holland. And England's attitude decided Italy.

The General Staff underestimated England, as the Admiralty Staff did America. Herr von Hentig gives us the credit for not having wanted war ; he says :

"originally the English nation was very far from being war-desirous. England's population was at heart pacificist."

But the invasion of Belgium killed all such feelings. It was absurd of the German military chiefs to argue that they must go through Belgium because the Franco-German frontier, one hundred and sixty miles in length, was too narrow for envelopment to be used. Its short length made it possible to hold it defensively with small forces and employ all the rest against Russia.

The mere tactical result of entering Belgium was 16 divisions on the debit side :—6 Belgian divisions plus the B.E.F., whilst 4 German divisions had to be left to watch Antwerp. All this to bow the knee to the German doctrines of the "offensive at all costs," and "envelopment." And the German General Staff applied both doctrines wrongly. Why, in God's name, advance against the Russians whilst engaged to the hilt in France, and let the Austrians do so too? It was notorious that the Russians fought best on the defensive, were stupid and cumbrous in the offensive, and their communications poor. Why not take up an enveloping defensive attitude, wait for them, and then attack them? Similarly, as it was well known that the French meant to take the offensive, why not let them do it? Let them get all committed before attacking them: do not go out to meet them. For, in the end, it was the Germans who were enveloped at the Marne!

"The offensive spirit, wrongly understood and wrongly applied, instead of a receipt for victory became a certain instrument of self-destruction."

To apply envelopment with any hope of success requires superiority: superiority in numbers, or in moral, or in technical apparatus. The Germans had not got any of these in sufficient quantity over the French to allow them to relinquish any possible advantage. It saves power if the enemy will march forward into envelopment. In the north of France, owing to the direction of the rivers, whilst holding the line of one, it would have been possible to make the flank attack under favourable conditions between two rivers. The vital problem was not to rush on, but to make the enemy advance and to lengthen his line of communications, and, whilst thus tempting him to a tactical victory, to inflict on him a strategic defeat.

The farther the Germans went forward, the worse for them, and they went too fast for their lines of communication and signal services to keep up; whilst Crown Prince Rupprecht actually chased the French First and Second Armies out of the envelopment when

they tried to prepare themselves for it by their foolish advance. The two great masses bumped into each other by surprise and without taking the most elementary military precautions. The French offensive failed, but the Germans were utterly astonished to find that in stopping it half of their men had become casualties.

Herr von Hentig thinks that the fortunate formation on a flank of the French Sixth Army (Maunoury), in the exact place for the envelopment of Kluck, was an accident ; its real purpose was to protect Paris, and, in support of this theory, adduces that Joffre actually ordered a retreat on the other flank from Verdun. He puts it plainly that " Kluck gave the order to retreat." When, after the failure of the knock-out blow, the Germans began to dig in,

" they buried some of their blind belief in victory, and with it a portion of German power."

Reaction to the first failures was slow ; as the author says :

" Psychologically it is natural that the stiff hard Prussian mind is combined with the incapacity to react quickly and appropriately to new experiences."

Germany, however, did not change her strategic ideas, except in the one retirement to a prepared position in 1917. She merely sacked her unsuccessful commanders, Moltke, Falkenhayn and Ludendorff in succession, blaming the man and not the system. Joffre, on the other hand, survived all his military disasters and fell for political reasons.

After the failure to defeat the French decisively in the first six weeks, the author holds that Germany should have fought to gain peace and should have abandoned all thoughts of conquest and " annihilation." Nothing should have been done to arouse French and British national feeling—far less America's—too deeply ; offensives towards Paris or the coast should have been avoided at all costs, and after successful attacks elsewhere peace offered.

The author next shows how favourable for defence—by the lie of the rivers—was the German and Austrian position on the Eastern Front. To develop the situation on this front a defensive-offensive strategy and unity of command were required. Neither materialized. Entering Russia should have been avoided like poison. But in that theatre, as in France, nothing but the offensive was considered. To carry out the proposed strategy it is suggested that there should have been a large force grouped near Krakau and another on the Lower Vistula, to act offensively when the Russians came on, and

that the rest of the front should have been held defensively. After the Austrian collapse in Galicia, the offensive in the West (First Ypres) should have been at once stopped. Hindenburg failed before Warsaw for lack of men ; he was unable to achieve a decisive success at Lodz for the same reason ; yet when he was sent more men he wasted them without result—except a few prisoners—in the winter battle of Masuria, and then in a diversion into Curland. Utter childishness (*Spieleret*), says the author, to undertake great enveloping operations, when his forces were only sufficient for—and the politico-strategic situation indicated—small local threats.

The Gorlice—Tarnow offensive of 1915, planned by the Austrian, Conrad von Hötzendorf, gained an immense amount of Russian territory, which only added to German embarrassments. It was too late to be decisive—its political hour had passed. Fancy if it had been carried out in August, 1914 ! Austria-Hungary was already beaten, her help was ineffective. Italy was on her flank. Much of Germany's strength was dissipated for little result :

“ Who fights such battles is victorious, but no victor, and sooner or later discovers this.”

The attack on Verdun in 1916 meets with qualified approval on psychological-political grounds, as being less stirring to the French than a movement towards Paris ; the author considers that, if successful, it might have induced the French to listen to peace overtures—the mutinies of 1917 would have taken place earlier, and Great Britain could have been bought off by the evacuation of Belgium. When the attack failed, Falkenhayn had not the courage to break it off, and all the greater was the psychological impression in Germany when the French recovered Douaumont and all the ground lost :

“ The Somme was the muddy grave of the German Field Army and of the faith in the infallibility of the German leading, dug by British industry and its shells. . . . The most precious thing lost at the Somme was the good relations between the leaders and the led. The German Higher Command, which entered the war with enormous superiority, was technically beaten. It had fallen behind in the application of the destructive forces of nature, and was compelled to throw division after division unprotected into the cauldron of the battle of annihilation.”

The paradox, however, was that it was Germany's bad luck that the front, although it wavered and quivered, never broke ; for a break would have compelled retreat to the unassailable Meuse

position, and would have aroused all Germany. There was a political chance after the Somme, for the Allied Statesmen failed to grasp the import of the battle and were discouraged, although "1916 had shaken the German Army to the marrow." The nomination of Hindenburg-Ludendorff, however, made peace ideas illusory, and was another step downwards towards Germany's defeat. Herr von Hentig, however, rightly guesses that

"fear of Germany was the obstacle to peace. . . . Peace with this people who in a fight 'hit below the belt' [translated as *unter die Gürtellinie schlug*] seemed more dangerous and hazardous than war: for in war the Allies were bound together, in peace each stood alone."

U-boat warfare was a clumsy mistake. Psychologically it roused intense hatred of Germany, and was most valuable for propaganda purposes. Instead of the small German Navy being subservient to the Army, the naval policy first brought into the war one formidable land foe, Britain—"the German plan was the father of the great British Army"—and then another (U.S.A.); it brought the hunger-blockade, and eventually "the Fleet wrecked the Army."

Another gross mistake was the appreciation "founded on vanity," that

"only Germany and France possessed the secret for raising great armies, and that a man cannot be a good soldier unless he has a long pedigree of military heroes." In a war of machinery and materiel, "careful individual training is waste of time and money, which should be devoted to perfecting technical equipment, clothing, transport and food. . . . The American factory-armies could not perhaps have stood up to the German Army of 1914; but, after the Somme and the starvation winter, their divisions, which strewed the field with waterproofs and bully-beef tins, were good enough to give the death-stroke to the over-tired and famished remains of the German host."

The Russian Revolution was the last piece of German luck; instead of utilizing it and the conquest of Rumania to show how peace-disposed Germany was, and offering good terms, it only made evident her grasping and conquering disposition.

Germany's defeat was largely due to psychological causes:

"We were not strong enough to stand victory, and we were not weak enough to avoid new foes by wisdom and foresight. Russian demobilization did not help us. We went from stupidity to stupidity, from ill-founded hopes to hopes in miracles and chance. . . . We had awakened the hate of the whole world, that should never be aroused unless one is strong enough to repress it."

The so-called peace with Russia still left two fronts, for the war of conquest was pursued in the Ukraine, Crimea, Caucasus and Finland. The East should have been quieted down, the front held against Italy, and every German and Austrian soldier concentrated against France, when, after one great attack, the front should have been drawn back to the shortest line, and France offered peace : the retreat in October, 1918, was aimless and at the enemy's pace, and it was seven months too late.

The succession of attacks in 1918 was waste of life and power. There should have been one great attack, made, say, in six groups : one army, wedge-shaped to break through ; two armies to roll up the enemy's line right and left of the break-through ; two others to attack right and left of the main break-through and push for the enemy's communications, and a sixth army, the strongest of all, with a large force of mobile artillery, followed (not preceded) by cavalry, to leap-frog the first army and reach a strong strategic position to deal with the enemy's reinforcements. It is to be feared that this scheme of Herr von Hentig's is much like General Nivelle's, though on a larger scale.

If there was only sufficient strength to make one attack, it should have been tried at the Chemin des Dames, against the French, not the British.

The hurry to make the attack in March, for fear of the arrival of masses of Americans, was a gross psychological mistake ; the attack did but hasten the arrival of more Americans : by May only 240,000 had been landed ; in each of the following two months 250,000 came over. A graphic in the text shows by a curve the gradual arrival of American troops up to April—inclination of curve, $2/7$ —and the great increase in the following month—slope of curve, $5/2$.

Meantime, fifty-four German divisions were left in the East, and Austria had some sixty-five divisions opposing fifty-five Italian, fifteen in the Ukraine, and three and a half in Albania ; she could have spared twenty to twenty-five. But Hindenburg "had a mean opinion of the fighting power of the Imperial and Royal troops." Only in June did he ask for Austrian assistance, and then only for 6 divisions ; 4 were sent, and in September he renewed his request,

"pleading the indispensable necessity for them if the war was to have a successful ending.

"A terrible picture," says the author. "In the West the death-struggle of the German infantry. In two other theatres, in the East and South, a million men available, and in the Homeland another million of war-fit men."

He admits that it is easy to be wise after the event, but urges that he has applied common sense to Germany's problems. Though claiming to be a psychologist, he does not, however, seem to understand German psychology. Never at any time after a victory was Germany prepared to offer reasonable peace terms. War was regarded as a profitable business, and she could not conceive a peace without profit to herself. So buoyed up had she been by lies of successes and victories, that it became impossible to tell her the truth. Hindenburg knew full well that after August, 1918, the only policy was to go back to a defensive line, but to do so was to disillusion the German nation and its allies, and for psychological reasons it would have brought earlier the collapse that came from military defeat in the field in November, 1918.

Essai sur la Doctrine de Guerre des Coalitions. La Direction de la Guerre (novembre 1914-mars 1917), by Colonel Cehmichen (Paris, Berger-Levrault, 10 francs), is a far more important and authoritative book than would be suspected from its title. Colonel Cehmichen was with Colonel Billotte the organizer of the "T.O.E." (*Theatre d'operations extérieures*) Section of the 3rd Bureau (Operations) of General Joffre's staff, used by him for the coordination of the Allied operations. Founded on the documents in the French Historical Section, the book gives an authoritative and full account of the efforts of General Joffre, from the end of 1915 until his removal from command, to obtain unity of action from the Allies. It is divided into three parts: "The general direction of the military operations of the Coalition in 1916"; "The engagement of the Coalition in the East (1914-15)"; and, "Could the Coalition have won the war in 1917?"

At the end of 1915, the failure of the Gallipoli expedition, the complete defeat of Serbia, the unfavourable conditions under which the affair of Salonika had been begun, the small success of Italy, not to mention the driving of Russia out of Galicia and Poland, made it evident that no important result could be obtained unless the Allies coordinated their efforts and formed a single united front against their enemies, so as to deprive the Central Powers of the possibility of profiting from their central position.

The first step was to make General Joffre Commander-in-Chief of the French Armies—he had hitherto been only Commander-in-Chief of the Armies of the North-West—and this was done on the 2nd of December, 1915. In the T.O.E. he was given machinery to exercise his influence on the general conduct of the war. He

thereupon called a meeting of the commanders or representatives of the various national Armies at Chantilly (6th, 7th and 8th of December, 1915):

“ It was necessary to make suitable and decisive economies and reductions in theatres that were secondary or without a future : such as Mesopotamia, where the British forces had just suffered a serious check ; Armenia, where the Russian Army of the Caucasus was involved without a definite object ; Egypt, on which weighed the illusion of a menace ; the Dardanelles, most of all, where the expeditionary force had no chance of extricating itself from the paradoxical situation in which by prodigies of energy, but at the cost of excessive losses, it had maintained itself since April.”

The conclusions of the Conference, printed *in extenso*, gave a general consent to united action and mutual assistance ; approved of troops remaining at Salonika (Great Britain abstaining from expressing an opinion) and the organization of its defence ; and demanded the complete and immediate evacuation of Gallipoli, and the reduction of the forces in Egypt to a minimum.

The rôle of coordination and conciliation of the various interests was confided by common implicit accord to General Joffre, and the Allied Governments ratified the decision by definitely accrediting to him the chiefs of their military missions, who formed a sort of Allied General Staff at French G.Q.G.

General Joffre's plans for 1916 are well known :—a simultaneous offensive of the French and British on the Somme ; of the Italians and the Russians (Brusilov's offensive) against the Austrians ; and of the Rumanians and Salonika forces against the Bulgarians. Weather and ground on the various theatres prevented an early start, and then the German Verdun offensive and the Austrian Trentino offensive upset the preparations. Rumania hesitated to come into line until too late, there were difficulties with Greece, and the Bulgarians struck first before the Salonika offensive materialized.

Still, much had been accomplished ; for in 1916, for the first time since the Marne, the Germans had the worst of the general result. Joffre was nothing daunted, and had in preparation the scheme for a great combined offensive in 1917, when he was removed from power, and there was not again any sort of unity of command until April, 1918.

The section on the Salonika question brings out that General Joffre and the French Government from April, 1915, onwards were definitely in favour of a campaign in the East, as part of the combined effort against the Central Powers ; but General Joffre was not prepared to spare any divisions until after the Champagne—Loos

offensive in September had taken place, nor did he wish to send them until a plan for their employment had been worked out in the new theatre by a competent commander. The first idea was an operation on the Asiatic side of the Dardanelles as advocated by Generals d'Amade and Gouraud, and this was agreed to at a conference held at Calais on the 11th of September, 1915, at which M. Millerand, Generals Joffre and Sarrail, Lord Kitchener and Sir John French were present. Orders were given for the assembly of 4 French divisions at Marseilles on the 10th of October. It was too late. On the 22nd of September Bulgaria began mobilization. Two Allied divisions from Gallipoli were landed at Salonika on the 5th of October, but, on the 6th, the invasion of Serbia was begun by the Austro-German-Bulgarians; on the 7th, M. Venizelos, the pro-Ally Prime Minister of Greece, was dismissed; Greek help was no longer to be expected, and, on the 23rd, the Bulgarians occupied Uskub, cutting off the Serbian forces from junction with Salonika.

On the 29th of October General Joffre in London appealed to the War Committee, but found it opposed to Balkan operations. In the end, after much discussion, 5 British and 4 French divisions were, at the end of November, assembled in Salonika; but at the Calais Conference of the 4th of December their re-embarcation was demanded by the British representative. At the Inter-Allied Conference held at Chantilly on the 6th, 7th and 8th of December, 1915, when the general plans for 1916 were settled, Sarrail's advance having failed to help the Serbians, General Joffre had to be content with an agreement that the Allied forces should prepare defensive positions round Salonika. Then, on the 8th of December, came the decision to evacuate Gallipoli. The British Government was opposed to active operations at Salonika, but consented to unity of command under General Sarrail for defence purposes. Joffre now evolved a scheme for employing 400,000 men in the Balkans, at the time of the general Allied offensive of 1916. This was prevented by the German attack at Verdun, but, meanwhile, Sarrail demanded more men, and the British, only after much persuasion, agreed to send 2 more divisions. Under pressure from Joffre, the British contingent, under General Milne, was placed under Sarrail's orders, a separate commander, General Cordonnier, being appointed commander of the French troops. It proved hopeless to get Russia and Rumania (about to come into the war) to agree to a common plan, and when at last on the 17th of September, 1916, Rumania fixed on the 26th of September for operations to begin and Sarrail was ready to move, the Bulgarians attacked on the 18th and dis-

located the Allied plans ; and Sarraill found it necessary to reorganize before he could advance. The Salonika offensive was eventually continued, but by this time Rumania had pushed into Transylvania, and Joffre could not get her to pull back or persuade Russia to help her on her rear on the Danube, where danger threatened.

The year 1916 was, however, more generally successful than 1915, and the very blunders in the disunited Allied leading inclined all the Allies to pay more heed to Joffre's plan for a united offensive in 1917. At this moment the French Government replaced him in command by General Nivelle, and relegated him to obscurity. All attempts at cooperation dropped. Nivelle concentrated his attention on his plan for breaking through, and in 1917 there was no directing head. Joffre's plan was cut down and then abandoned. The author may fairly claim that 1917 would not have been the year of failure that it was had Joffre remained as coordinator of the Allied Armies.

WESTERN FRONT

The twelfth volume of General Palat's history of the war, *La Grande Guerre sur le Front Occidental* (Paris, Berger-Levrault, 24 francs) has the sub-title, *L'Année d'Angoisse* 1917, and deals with the period from April to December, 1917, which, after August, 1914, was most critical for the French nation, and truly a time of anguish. The book is of extraordinary interest, and gives more information about the mutinies in the French Army than has hitherto been accessible. We have the whole story of the initiation, preparation and failure of the Nivelle offensive ; of the friction between General Nivelle and General Haig ; of the resignation of General Lyautey, the Minister of War, and of the disastrous advent to power of M. Painlevé, a mathematician ; of the scapegoats for the failure of the offensive ; of the appointment of General Pétain as Commander-in-Chief ; and of the secret peace negotiations of the Emperor Carl of Austria. Short accounts of the British operations at Arras, Messines, Passchendaele and Cambrai are included, but without any suggestion of the part they played in keeping the Germans from attacking the French in their weakened condition.

According to General Palat : "The year 1916 terminated under happy auspices for the *Entente*." Rumania had certainly succumbed, but Austro-Hungary was tottering and offering an ever-decreasing resistance to the Italians. At Verdun the Germans had failed.

" On the Somme the Armies of General Foch and the young divisions of Field-Marshal Haig had inflicted a series of defeats on the enemy, threatening to render the salient Péronne, Roye, Lassigny untenable. The German losses in men were immeasurable,"

and the sufferings caused in the interior of Germany by the blockade had become very severe.

General Joffre had proposed to continue the general offensive on all fronts, beginning on the 1st of February, making the principal conjoint Franco-British one in the Somme area, with a subsidiary one by the French Fifth Army in Champagne. Then Parliamentary jealousy of Joffre's power brought about his fall ; Foch also went out of favour ; Nivelle, whose ideas for speedily ending the war caught the civilian mind, was appointed Commander-in-Chief over the head of Pétain, and the Verdun school, as opposed to the Somme school, became in the ascendant. Nivelle proposed to enlarge the Champagne offensive from one to three Armies, and to make it the principal attack, and to conduct it on the plan found effective on a small scale at Verdun after guns and men had been withdrawn by the Germans to fight on the Somme. All higher officers who raised objections to the method, including Pétain, were " exiled " to other parts of the front, and General Micheler, a cavalry officer, who had only commanded an Army for a short time, was selected to direct operations of the three Armies under Mangin, Mazel and Duchesne.

Perhaps a considerable success could have been achieved if operations, as arranged by Joffre, had been begun on the 1st of February. But the change of plan entailed immense preparation in Champagne. Then the German retirement to the Hindenburg Line upset the situation, although Nivelle clung to his original idea in spite of it, and, as the author says,

" owing to an incomprehensible illusion, apparently seemed to consider the enemy negligible."

The French preparations were clearly visible, and, although Nivelle's subordinates, notably General Mazel, warned him that the enemy knew, he persisted, although surprise was obviously out of the question. Amongst those who had no belief in the new French Commander-in-Chief was Sir D. Haig, and Nivelle's attempts to get complete control of the British forces failed. Yet he managed to get Haig made subordinate to him for the battle ; for Mr. Lloyd George, the Prime Minister,

" un homme d'Etat destiné à jouer plus tard un rôle singulièrement néfaste,"

became Nivelle's most ardent partisan ; he informed the French Military Attaché in London that he had

" une entière confiance dans le général Nivelle et la certitude absolue qu'il est seul capable de mener les opérations à bonne fin cette année même."

In March General Lyautey, having expressed himself in the Chamber in a manner considered too autocratic and military to please the taste of the members, resigned, and the Briand Ministry fell ; M. Ribot succeeded, with M. Painlevé as Minister of War. The latter had his doubts, but unfortunately merely interfered with the Commander-in-Chief ; he would not accept his resignation when it became obvious to Nivelle that the Government had no confidence in him.

Nivelle's attempt to break through in one brutal effort on the 16th of April, 1917, having failed, the Minister interfered still further : he forbade one portion of a renewed attack, against Brimont, under the misapprehension that it would cost 60,000 casualties, when he had been told that it would require that number of men to execute it. Certain members of the Chamber of Deputies serving in the Army began to intrigue against Nivelle, circulating rumours that the Army had lost faith in him. Painlevé now suggested resignation, but Nivelle, with judgment, said that the moment was inopportune. On the 15th of May the Government appointed Pétain in his place, and they deprived Mazel and Mangin of command, and reduced Micheler to the command of an Army.

" These proceedings," says the author, " were certainly not calculated to restore confidence and discipline, which had been so badly shaken since the 16th of April."

The first collective manifestation of indiscipline took place on the 3rd of May, when in a regiment of the 2nd Colonial Division—in which leaflets had been posted up inciting the troops not to obey—a number of men collected and shouted that they would not fight whilst their comrades in the munition factories were getting 15 to 20 francs a day. This outbreak was overcome ; but threats of disobedience multiplied in the first fortnight of May, there being cries of

" We will defend the trenches, but we won't attack."

" We have had enough of being killed on the barbed wire."

" We are not so stupid as to march against undamaged machine guns."

Then on the 20th, four days after Nivelle's dismissal,

"grave mutinies broke out, which went on occurring for three weeks, first in one unit, then in another, without connection, but always in similar circumstances—the going into the line from rest of units which had already fought, or new units excited by stories told them by combatants."

In January, 1917, Nivelle had reported at length—his letter is given—of the insidious work of revolutionaries and *défaitistes* among the troops, particularly those returning from leave, but nothing was done by the Government to stop it. Indeed,

"the Parliamentarians accentuated the uneasiness among the troops by manifest exaggerations and inopportune recriminations."

Then,

"after having shut their eyes on the causes of demoralization, Parliament was disposed to exaggerate the dangers that might ensue from it."

So grave did the situation seem that, according to M. Painlevé, in June there were only 2 divisions on the Nivelle front of attack which could be absolutely trusted.

General Palat gives some figures which show the gradual increase of trouble in the four years 1914, 1915, 1916 and 1917. The cases of desertion in them were, 509, 2,433, 8,924 and 21,174, respectively; cases of abandoning a post—1,365 in 1914 and 4,650 in 1917; refusal to obey orders, 29, 201, 196 and 353; condemnations to death in the Army, 206 in 1914 and 528 in 1917.

Pétain was able to deal with the situation, but under grave difficulties :

"At certain points of the front the trenches were scarcely guarded, the units ordered up to them refusing to go or being unreliable. Good battalions were kept for three weeks or a month in the line, and the fatigue and nervous tension irritated and demoralized them in their turn."

In the end 150 ringleaders were condemned to death, of whom only 23 were executed. The greater number of the condemned men were sent to Morocco, Algeria and Indo-China, and "their disappearance created a great impression."

General Palat shows the difficulty that the French had in keeping units up to strength. The maximum with the colours was reached in April, 1917, and the result of Pétain's careful husbanding of the troops in 1917 was that deputies demanded that the older classes should be released :

"more than ever Parliament showed itself unequal to its task. Instead of making war it made politics, and the worst politics, those which are dictated by electoral considerations."

Partial satisfaction had to be given to these dangerous demands :

"The farmers and agriculturalists of 1890 and 1891 were sent back, the classes of 1888 and 1889 were released on leave, and a number of specialists placed at the disposal of the railways and factories. The total was over 300,000."

Parliament also increased the leave period, which meant that 400,000 to 530,000 men would always be absent from the front. For the winter and autumn the sole important contingent was the class of 1918, about 180,000 men. The other resources, convalescents, native troops and combed-out men were unimportant. All hope lay in the arrival of the American Army. The most extraordinary thing in 1917, which the author mentions but does not explain, is that the Germans, who must have known of the state of the French Army, made no attempt to strike it. We know now from German accounts that after the failure of the Nivelle offensive every available man was sent to the British front.

Those who remember Colonel Grasset's wonderful account of the action of Ethe* will recall that it describes the fighting of the French 7th Division under General de Trentinian. This Division was thrust into a trap by higher orders in the disastrous advance of the IV Corps in August, 1914. General Trentinian himself has now published a book : *Etat-Major en 1914 et le 7^e Division du IV Corps 10 août au 22 septembre 1914* (Paris, Fournier 12 francs). It is a temperate but outspoken *exposé* of the faults of the French Staff in 1914 :

"Our best military writers," says he, "have demonstrated the faults of the second Moltke, of Kluck, of Goeben, of the spouses Hindenburg-Ludendorff ; they have nearly all kept silence on our own faults. There are far too many in France, particularly in the General Staff, who would explain our checks by the incapacity of our generals in 1914 and our victories by the worth of those who succeeded them."

He refuses to say with the late General Buat that it was the inordinate vanity of the German Great General Staff and its sure confidence in its superiority, after the triumphs of 1866 and 1870, that brought

* Reviewed in the "*Army Quarterly*," Vol. IX, No. 1, October, 1924.

about German failure in 1914. He pleads that no glory will be lost by examining the origin of the French mistakes in order to discover the reforms necessary to prevent such misfortunes in the future.

His general deduction is that, even when the French generals were up to their work, the influence of their staff officers was not always happy, and the belief of these gentlemen in the Staff College doctrine of the offensive on all occasions at all costs was fatal. But they had, he says, the ear of people in high places, considered themselves invested with the control if not the command of the formations to which they belonged, and usurped the powers of their generals. They were often so grossly wrong that their views were sometimes over-ridden : " Lanrezac, for instance, wisely retired from Charleroi, refusing to hear the protests of his staff ; Joffre, in disaccord with his staff, delivered the battle of the Marne." The General Staff was wrong with regard to the value of fortifications in the northern frontier, of heavy guns, of machine guns and of reservists. Going into details, he shows the failure of the General Staff in the opening phases, in particular in relation to the 7th Division.

The fault of the French Staff College, he believes, was that it trained commanders rather than staff officers ; this he would remedy, reserving such high studies for selected colonels and generals ; doctrine should be settled by the Chief of the Staff ; more care should be taken in selections for promotion ; all officers who aspire to command should be acquainted with the working of the arms other than their own by actual attachment, and senior officers, before promotion to general, should command other arms.

A new series of pamphlets : " Tactical Experiences from the World War " (*Taktische Erfahrungen aus dem Weltkrieg*, 1914-1918) is being published by Mittler and Son of Berlin. The first, Heft I, entitled *Waldgefechte in den Argonnen* (Wood Fighting in the Argonne), is by Major-General von Borries. The Argonne, an outlyer of the Ardennes, between the rivers Aire and Aisne, west of Verdun, is not only heavily wooded, but of irregular and broken contour. In the opening phase of the campaign, the Germans marched through it and back again by the roads, and there was no fighting ; but when, on the 22nd of September, their Fifth and Fourth Armies attempted to advance on either side of it without occupying it, they found the French in possession, and in position to outflank their movement. The Fifth Army (Crown Prince) attempted to secure its flank by occupying a small portion on its eastern edge. The Fourth Army was compelled to stop and ask for

help from the east, as it dare not pass it by. One German regiment was completely cut up, and though only two battalions out of three were engaged, could only muster next day 14 officers and 905 men. It is somewhat curious to read :

"The casualties of Infantry Regiment No. 98 can hardly even be estimated, as its strength when it marched off against La Chalade is not accurately known ; they may be more than 500 men."

The French reported they had accounted for nearly 3,000 !

In consequence of the difficulties, a special command of 3 divisions under General von Mudra was formed to deal with the Argonne. It is obvious even from the German narrative that, so long as open warfare lasted, and this seems to have gone on until the leaf fell, the French had the best of it, standing mainly on the defensive. They defended clearings, roads (which they barricaded) and open spaces with machine guns, wooded parts by well-concealed posts. It was not until winter arrived and the trees were bare that the Germans, better equipped than the French with grenades, trench mortars, etc., held their own. Mudra, an engineer officer, carefully organized his front, and began mining, and gave the French much trouble. A claim by "a superficial calculation" is made that up to the end of the year, the Germans in the Argonne, with a loss of only 7,800 men, put 29,000 French out of action ! The calculation is of the same class as the earlier one : that $3,000 - 919 = 500$. It is a pity that Germans continue to write such absurdities, although the reading of them may console their wounded pride at being defeated decisively in the field. General von Borries, earlier in the book, emphasizes the difficulties of the Germans, and admits they "suffered the heaviest losses" (p. 42) and adds :

"whilst the French had the advantage from the first that they knew the Argonne, the Germans had to learn the characteristics of the new fighting ground slowly, and with sacrifices of life. The first patrols and detachments disappeared into a green sea, whose waves closed over them as they penetrated. If any one left the road, his feet were caught in the clay and his body by creepers. Where the enemy waited, many a man disappeared into the darkness of the wood, never to return. Closed bodies could only get forward on the broad hard roads ; tracks, wood slides and paths allowed only single file."

Small columns were tried, but they tended to drift away to the roads and paths. Only infantry could be employed ; engineers, if attached, were used as infantry.

The form of attack depended on the thickness of the wood, and the only way to get a simultaneous advance was by some noise signal : cheering, beating drums and blowing bugles. Big attacks varied by small ones gave good results. It was of advantage to secure a well-marked ridge and fill the dip in front with obstacles.

Details of a number of small fights are given in illustration ; some of their names will be recalled as having appeared in the communiqués : Bagatelle, Bois de la Grurie, St. Hubert, Four de Paris. Gas and flame projectors will make wood fighting in the next war very different from what is here described.

The latest official monograph in *Schlachten des Weltkrieg* series published by the *Reichsarchiv* is *Argonnen* (Oldenburg, Stalling, 5 marks), by Major E. Schmidt. The greater part of it is devoted to the open fighting in 1914 and the intensive trench warfare in 1915, already described by General von Borries in the book reviewed above. After this died down in October, 1915, the first of the 3 divisions engaged in it was withdrawn ; in August the 2 others followed, and the Argonne became a quiet front for resting divisions. In September, 1917, it was taken over by the 2nd Württemberg Landwehr Division, which remained there until turned out by the Americans at the end of September, 1918. The German system of leaving divisions in the same sector for long periods was repaid by the quantity and efficiency of the work done on the defences.

La Grande Guerre vécue-racontée-illustrée par les Combattants (Paris, Quillet 200 francs), two volumes edited by M. Christian-Frogé, with a preface by Marshal Foch and an appreciation of the French soldier by Marshal Pétain, is a most beautifully illustrated book : embellished with water colours, sketches, photographs, autograph letters and maps—we notice, however, a photograph of Wilhelm II with Field-Marshal von der Goltz and others round him, described as “ the Kaiser and Staff before Nancy ” ; but it is a manœuvre photograph taken in 1900. The text, by forty eminent hands, deals with various phases of the war : concentration and plan of campaign, operations in Alsace, operations of the French First and Second Armies on the 19th and 20th of August, the battle of Morhange, operations of the French Third and Fourth Armies, Towards Charleroi, Maubeuge, etc. It does not give a complete history, and is singularly uneven in the allotment of space. Thus the French operations alongside the British at the battle of Loos get two pages, and those of the 55th Division are described

separately and receive three pages. The account of the battle of the Marne, with an excellent map showing the progress of the fighting in five colours, is from the skilled hand of Colonel Grasset.

COLONIAL

The Historical Section of the Belgian General Staff has published the first volume of *Les Campagnes Coloniales Belges 1914-1918* (Brussels, Imprimerie Typographique de l'J.C.M., price not given). It deals with the operations in the Cameroons and Rhodesia and the defence of the eastern portion of the Congo State. The volume is illustrated with photographs and well provided with maps.

The neutrality of Belgium was guaranteed, as is well known, by the five Great Powers; the independent Congo State had likewise in 1885, by an *Acte Général* of Berlin, been declared perpetually neutral, and in 1908, when the territories of the Independent State were transferred to Belgium, the permanence of the two neutralities of Belgium and its great colony had been emphasized by the Belgian Government. On the 6th of August, 1914, after Belgium had been invaded, instructions were sent to the Governor-General of the Congo to observe a strictly defensive attitude on the common frontiers of the Belgian Congo and the German Colonies, the Cameroons and German East Africa.

On the 15th of August, 1914, the Germans, confident of success in Europe, violated Belgian neutrality in Africa by firing on a village near the head of Lake Tanganyika, sinking boats and cutting the telegraph wire at fourteen places. On the 22nd, a similar attack was made on the port of Lukuga (Albertville) near the centre of the Lake. The Belgian Government thereupon ordered the Governor-General to take the necessary military measures for the defence of the territory, and authorized him to assist the French forces operating in the Cameroons.

On the 5th of September the Germans attacked Abercorn in Rhodesia at the south end of Lake Tanganyika. The officials there asked for help from the Belgian post of Piveto, 150 miles to the west. A battalion was sent. Thus did Belgian forces become involved in the Cameroons and Rhodesia.

The local forces in the Belgian Congo consisted in 1914 of about 15,000 men, including police, divided into twenty-six companies, with two or three Europeans without much military knowledge in each. Designed solely for keeping internal order, they had no transport and supply services or medical equipment, and the arms were

old-fashioned. The men had no field training; only gradually were the companies formed into battalions, regiments and brigades, and in April, 1916, into a division.

The Belgian contingent in the Cameroons consisted of 10 Europeans and 570 blacks, which operated with the French. In Rhodesia, two battalions from Katanga, 55 Europeans and 1,360 blacks, under Major Olsen were employed.

After assistance rendered in Northern Rhodesia and the Cameroons in 1914, whilst the British-Belgian offensive of 1916 in German East Africa was in preparation, the Belgian Congo troops remained on the defensive, taking part only in a number of small encounters with alternation of success and failure.

ITALY

The Italian General Staff has issued the first volume, with a volume of appendices, of the official history of Italy in the war: *L'Esercito italiano nella Grande Guerra 1915-1918* (Rome, Provveditorato Generale della Stato Libreria). Its sub-title is "The Belligerent Forces," and seven officers are named as its compilers. It gives a history of the Italian Army from 1861 to the opening of the war, going particularly into its equipment, numbers and mobilization. There is then a chapter on the Austro-Hungarian forces, a summary of the operations from August, 1914, to May, 1915, when Italy entered the war, and a description of the theatre of operations. There is a bibliography. The book is beautifully got up and printed.

RUSSIA

In the series of monographs on the war the *Reichsarchiv* has just published *Tannenberg* (Oldenburg, Stalling, 5 marks). Readers of the "Notes on Foreign War Books" must be tired of hearing about this battle; for the acrimonious disputes about it that have arisen in Germany have led to the publication of very numerous books and pamphlets, of which the most important were those by Generals Max Hoffmann and von François. The narrative of the battle in the German Official History, Volume II, "a particularly detailed description," as the present book says, only added fuel to the flames, for in its endeavour to add to the credit of Hindenburg-Ludendorff, dates and times were, according to German critics, falsified. The object of the new official account is "to answer the controversial questions that have arisen"; but it makes Hindenburg,

"our President," its hero, and Hoffman's claim for Prittwitz and his staff is ignored. Incidentally, as in most German official histories, occasion is taken to spread propaganda of Germany's irresistible military prowess. The impartial reader of Tannenberg literature will come to the conclusion that for the strategy, Prittwitz's staff should have the credit. So far from Hindenburg-Ludendorff deserving any, they did their best, by their bungling initial orders, to miss a great opportunity. As for the tactics which brought about the surrender of the greater part of three Russian corps out of five, General von François should have the credit; had Ludendorff's orders been followed by him, all the Russians, except perhaps part of one corps, would have got away. The strongest confirmation of this view is the photograph of the victorious generals taken at Tannenberg on the tenth anniversary of the battle. In this François is seated in the middle, between Field-Marshal von Hindenburg and von Mackensen.

The *Reichsarchiv* narrative does not settle the controversy but introduces a new claimant for some credit: Moltke of the Supreme Command, from whom Ludendorff received directions as to the conduct of the campaign. In spite of the avowed purpose of the book, it does not provide the evidence obviously required. For instance, neither Prittwitz's operation orders for breaking off the unsuccessful battle of Gumbinnen against *Rennenkampf* on the 20th of August, 1914, nor those of the evening of the 21st which sent his Army against Samsonov, are given. Of the former we are not allowed to see even a paraphrase; of the latter we get only one sentence: "The Army will be assembled (*vereinigt*) on its right flank in East Prussia in order to advance against the left wing of these new enemy forces [Samsonov's Army is meant]." Equally important are Ludendorff's orders issued from Coblenz before he started by train for East Prussia. They are not provided. From a somewhat complicated paragraph we learn that Ludendorff confirmed François's proposal to detrain his corps near Deutsch-Eylau instead of farther west, and

"further, the fortresses of Thorn and Grandenz were instructed to assemble all available portions of the garrisons at Strasburg and Gosslerhausen. The intention was to form with them and the I Corps an offensive group, as strong as possible, on the west flank of General von Scholtz [XX Corps, guarding against the approach of Samsonov]. In the other area, care was to be taken to keep the passes between the Masurian Lakes in German hands. In order to prevent any further influence of Prittwitz on the operations until General von Hindenburg arrived, the corps were directed: 'after mutual understanding, particularly with the

XX Corps, to act independently on their appreciation of the situation. For the further course of the operations it is urgently desirable that the lake line should not be opened by the enemy from the rear.' "

There is no sign here of the germ of a great enveloping operation. In fact, the order to the corps to act on their own judgment led to two of them, the XVII and the I Reserve, giving themselves a day's rest, a loss of time which prevented them getting round Samsonov's right, or, indeed, taking any real share in the battle. There is a good deal of argument to show that Ludendorff's eventually formed idea of getting at Samsonov's right and driving him westwards was more far-reaching in its scope than Prittwitz's original idea of making the principal pressure against his left—which was carried out in the battle, François moving past his left flank to cut off his retreat. The matter does not seem of moment, as Ludendorff secured by his orders that the two corps which were to envelop Samsonov's right were not up in time to do so.

It may be noticed that the German historians lay great stress on the bad behaviour of the Russian troops in East Prussia: we learn that a Russian corps commander, Martos, was captured with a stolen silver bowl in his car. Indeed, propaganda rather than convincing argument is the strong point of the volume. It begins:

"In this volume is described a German victory that has hardly an equal in the history of war in all time and in all lands,"

and it ends with a long paragraph, beginning:

"History knows of few successes that can be placed alongside Tannenberg,"

and then forgetting Marengo, Austerlitz, Jena and Friedland, the compilers compare it with Hannibal's Cannæ to the disadvantage of the latter, and mentions Metz and Sedan. It concludes:

"No other nation can show similar great deeds of war. This cannot be chance. Recognition of this fact must fill every German with pride; it must encourage him in the time of misery and degradation; and it must also give him the confidence that the nation that fought Tannenberg has shown its true worth in the world and will again reach the position that is due to it, if it only remains true to itself and its great past."

It might be hinted that the "chance" that gave Germany victories was the accident that led her, after professing peace, to

attack weak and unready foes. To capture a few thousand Russians after reading the wireless messages which disclosed where they were is hardly a victory to make much of.

The claim that the Tannenberg campaign was a decisive one is true in a way. But not the way that Germans are asked by the monograph to believe. The opening action of Gumbinnen scared the Supreme Command so much that they dispatched two corps from France. The absence of these formations greatly contributed to the defeat of Germany at the battle of the Marne. Next, the elevation of Tannenberg into a great victory of Hindenburg-Ludendorff gave them such influence and raised such hopes of winning the war in the East that, despite Falkenhayn's plans for making the West the decisive theatre, the main forces of Germany were in 1915 employed on blows in the air in Russia; and the British Empire was given time to organize and to send the new divisions to France. Further, the prestige of Hindenburg-Ludendorff due to Tannenberg eventually put them at the head of all the German forces, and their great offensives of March—April—May—July, 1918, broke the fighting spirit both of the German troops and the nation. We may be grateful for Tannenberg, but only because little things lead to big.

There are some excellent reproductions of paintings of Hindenburg and Ludendorff in various heroic attitudes conducting the battle, and of photographs of some of the leaders.

BALKANS

Les Opérations en Macédoine. L'Épopée de Doiran 1915-1918, by Lieutenant-Colonel Nedeff of the General Staff of the Bulgarian Army, and translated into French by Commandant Goetzmann (Sofia, Carasso, 8 Swiss francs), deals with the defence of Doiran only, and not with the war as a whole. It contains a mass of details extracted from war diaries, which will be of great value in giving the Bulgarian situation if ever a British account is written. By itself the story is misleading. Except for a couple of pages on which the break-through of the Bulgarian line by the Allies is alluded to, when the author says, "We have not to examine the complex question of why the southern front collapsed," the book gives the impression of a series of victories. The chief cause of the national catastrophe is said to be the halt of the victorious Bulgarian Army on the Greek frontier in December, 1915, by German order. Colonel Nedeff now understands that "the Bulgarian people was used for the

realization of German schemes." There are six maps and a number of portraits.

TRANSLATION

General Hoffman's *Krieg der Versäumten Gelegenheiten*, reviewed in the *Army Quarterly* of April, 1924, has been translated into French under the title of *La Guerre des occasions manquées*, and with his *Tannenberg. Wie es wirklich war*, translated as *La vraie bataille de Tannenberg*, issued in one volume by Payot of Paris, at 25 francs.

REVIEWS AND NOTICES OF RECENT BOOKS AND ARTICLES ON MILITARY SUBJECTS

The Battle Book of Ypres. By BEATRIX BRICE. Murray. 10s. 6d.

A SHORT time ago there was consecrated at the Menin Gate of Ypres the great memorial arch to the memory of the thousands of nameless yet unforgotten dead who have made that corner of a foreign field for ever England. Hard on this comes the appearance, under the auspices of the Ypres League, of yet another memorial, not in stone, but in words, dedicated both to the dead who died that we might live and to the living who with them passed through the fiery furnace and returned alive. Neither author nor publisher, we feel sure, would ask for higher praise than to have it said that it is not unworthy of those whose deeds it is intended to commemorate.

The chief merit of this book is that in it the various representatives of units who were asked each to contribute their quota to the tales of heroism and suffering which together form the stanzas of the epic of Ypres, have been allowed to tell their tales in their own simple yet vivid language and in their own brief straightforward style. The deeds of all these soldiers—generals, officers, sergeants and simple privates—are narrated in greater detail than would be possible in an official history, and show to those of us who have not experienced war, while recalling to those of us who have, all that makes it terrible yet ennobling, fearful yet uplifting. Practically every regiment and branch of the service has something to contribute to this heroic story: regulars, new armies, territorials, volunteers, conscripts, home and Dominion troops—all are here represented; infantry, cavalry, gunners, tanks, R.E., R.A.M.C., R.A.S.C., Royal Air Force—each one tells of its toils and privations, its terrors and its triumphs. That happy humour—sometimes a trifle grim, but humour still—which is perhaps the most striking characteristic of the British temperament, peeps out in many of the stories, and one seems, reading them, to hear once more the echoes of those immortal songs anent the virtues and foibles of Mademoiselle of Armentières, the immortality-cum-evanescence of old soldiers, and

the plaintive desire not to die, but to go home. We seem to be again among those officers and soldiers who in the heart of a conflict robbed of every outward trapping of glory, its glamour lost, and with nothing left but its present horrors and toils and its future certainty of wounds, sickness, or death, still suffered on, fought on, and carried on. Historians in the years to come will no doubt argue and contend as to whether the continued defence of Ypres in 1914 and 1915 was from a purely strategic point of view worth while; whether the third battle in 1917 should be counted an Allied or a German victory; and whether all the losses suffered in the Salient brought us any commensurate material gain. But, like the famous charge of Balaclava, these sublime achievements of valour and sacrifice are not to be measured by material standards alone. Long after all these arguments have died away into silence, and we of this generation have joined those comrades of ours who sleep in Flanders fields, the story which this book so soberly yet admirably tells will still be remembered as an immortal page in the century-long saga of the British Army, as worthy as any of those which have emblazoned its illustrious past.

The History of the Somerset Light Infantry (Prince Albert's), 1914-1919 By EVERARD WYRRALL, with a Foreword by H.R.H. The DUKE OF YORK, K.G. Methuen & Co.

The writing of the history of a British Line Regiment in the Great War presents peculiar difficulties. The numerous battalions were usually in as many different divisions, and some in different theatres of war, so that many narratives, in distinct settings, must be kept alive with impartiality. Such atmosphere must be created as will enable the survivors to live again, more thoughtfully, the past, and an emotional height must be reached that will afford a not un-fitting memorial to the regiment's dead. At the same time the stories of its various units must be made to achieve a corporeity in which may dwell a single regimental spirit, embracing all units that have borne, or are to bear, the regiment's name. Nor is this all, for unless battalion histories also are to be produced independently the book must serve the ends of military history strictly so called, by not only telling of the events within the units in sufficient detail, but by showing the orders, information, errors, and accidents which brought those events about, with adequate quotation and reference; in short, it must provide a finer extension which may be fitted into

gear with the official histories of larger formations. That few succeed in this last respect is possibly due to the great difficulty of doing so without falling into that dryness of which the Duke of York writes with feeling in his graceful foreword.

This appears to be Mr. Everard Wyrall's seventh divisional or regimental history, and he has carried out his difficult task with very great skill. His attractive and satisfying volume, with its well-balanced and inspiring story, might well serve as a model for regimental histories still to appear. The 1st Battalion was in the 11th Infantry Brigade throughout the War; the 2nd Battalion, which had the misfortune to be one of those retained in India, took part in the 3rd Afghan War; all four 1st and 2nd Line Territorial Battalions served in India and two of them also in Egypt, and one in Mesopotamia and one in France; three Service Battalions served in France, in the 14th, 20th, and 21st Divisions; and two other T.F. Battalions saw service in France and Egypt; so that the single volume is a document to be recommended to the general reader, for it includes illuminating accounts of almost every type of action and of service in which our infantry was engaged.

The story of the 8th Battalion at Loos is a striking example of disorganization and mismanagement of every kind, and it would be of great use if, in such cases, a regimental history quoted sufficiently from the orders and arrangements of higher formations to show how and why their misfortunes came upon them. The narrative frequently refers to map squares, and it is a pity that a fuller use has not been made of the expedient of marking on the sketch-maps, otherwise not inadequate, the centres of squares referred to in the text. The position of troops cannot always be followed—an important case is the line of the 1st Battalion on page 44. In those operations, too, much mention is made of "the house marked A"; the fact that it is not so marked on the map renders vague a good deal of an otherwise detailed account. It is difficult to follow, on the map given, the text dealing with the 2nd Somersets in the 3rd Afghan War. A useful addition to the usual appendices is a record of the services of officers formerly in the Regiment and of serving regular officers extra-regimentally employed during the War. Photographs and illustrations are excellent; and all concerned may be congratulated upon an excellent regimental war history at a very low price.

The History of the 2/6th Lancashire Fusiliers. By Captain C. H. POTTER, M.C., and Captain A. S. C. FOTHERGILL. Privately published.

This book claims to "contain an account of the ordinary life of a typical 2nd Line Territorial battalion during the period of the Great War," and the authors, who served with the battalion throughout, say that even at the end of the period, "like the Scot when joking, we both saluted and presented arms 'with deeficulty,'" and remained to the end a body of indignant civilians who felt compelled to take up arms to defend their country. The claim is made good; and the history is, in a sense, an "unmilitary" history. There are no orders reproduced, and it will be of little use for the future student to seek in these pages an exact record of the play of cause and effect, of intentions, orders, actions, and results, which constitute military history proper. But the 6th Lancashire Fusilier will find alive here the life he led, and a very clear account of the happenings in his battalion.

The battalion was formed in September 1914, with men recruited in a single day in August, and the 66th Division was formed early in 1915 with it and other 2nd Line East Lancashire T.F. units. The division was kept in England until the end of February 1917—perhaps a more dangerous ordeal than any of those through which it passed later: Passchendaele, the retreat of the Fifth Army, reduction to cadre to help in the training of American units, reconstitution and the final advance. It is in the manner of recounting these regimental crises, and above all in the account of the retreat, that the book is excellent, and of great general interest. Every move in the fighting of each company can be easily followed, and the determined and bitter resistance made by the battalion is amply proved. As an "essentially human document" (to quote Sir H. A. Lawrence), and as an illuminating study of the Territorial fighting man, this book made a deep impression on the reviewer. He has little hope that it will be thoughtfully studied by those who may one day be charged with the making of a national Territorial Army in war; but it would be well if it were, for not only does it bring, as General Lawrence says, "simply and plainly, before all who care to learn, the heroic qualities of our race," but it is a complete exposition of the Territorial soldier, and a guide to the proper, and a warning against the improper, way of dealing with him.

Generals Sir H. A. Lawrence, Sir Hubert Gough, Sir Alexander

Godley, and Major-General Sir Neill Malcolm have written prefaces.

There are a number of misprints. The sketch-maps are sufficient and good though not always conveniently placed.

The Oxfordshire and Buckinghamshire Light Infantry Chronicle, 1926. Vol. XXXIV. Oxford: Slatter, Rose. 1927.

Though this admirable regimental chronicle has recently changed its editor, Brigadier-General C. G. Higgins having succeeded to Captain H. T. Birch Reynardson, it still keeps up its general level most successfully. The present instalment contains comparatively little of historical interest, except a sketch of the history of the Oxfordshire Militia, but it gives an admirable picture of the doings of a British regiment of the Line under normal peace conditions. Perhaps the great incident of 1926 was the performance by the *Depôt* of a historical pageant, showing the uniforms worn by the 43rd and 52nd Regiments at various periods in their existence. This "Pageant of Time" was first organized for a very successful searchlight tattoo at Oxford, and has since been repeated to much larger audiences at the Southern Command Tattoo at Tidworth in August 1927.

The Royal Montreal Regiment, 14th Battalion, C.E.F. 1914-1925. Compiled and edited by R. C. FETHERSTONHAUGH. The Gazette Printing Company, Montreal. 1927.

The 14th Battalion of the 1914 Canadian contingent, having been raised from three Montreal units of the Canadian Active Militia, received the title of Royal Montreal Regiment and seems to have been equally known by that, or by its abbreviation "R.M.R.," as by its number. One of the battalions from which it was drawn, the 65th Carabiniers de Mont Royal, was a French unit and when the Canadian contingent first arrived in France it was in the 14th Battalion that the French found soldiers speaking their own language who had come from the New World to redress the balance of the Old. Later on when a completely French-Canadian unit, the 22nd Battalion, C.E.F., reached France, the fourth company of the 14th tended to be replenished by English-speaking drafts, but quite a fifth of the battalion's long Roll of Honour bear French names.

The Royal Montreal Regiment's fighting record was a fine one. Its total casualties came to over four times the full establishment of the original battalion and its list of honours includes two V.C.'s,

seven D.S.O.'s and forty D.C.M.'s. The battalion shared in nearly all the chief exploits of the Canadian troops from Second Ypres onwards, and distinguished itself greatly in the battle that cleared the Germans away from the Amiens neighbourhood on the 8th of August, 1918, and in the piercing of the Drocourt-Quéant Line and in the passage of the Canal du Nord. Incidentally one notes (p. 200) that in March, 1918 when divisions from the British Isles were being cut down by three battalions, the Canadian Divisions not only retained the four-battalion brigade but had drafts enough to increase the establishment of battalions by 100 other ranks, so that a Canadian brigade's rifle strength was not far from double that of an English or Scottish one. Setting that aside, however, the Royal Montreal Regiment's achievements in the last four months of the war were remarkable, and a fine finish to a distinguished fighting career.

The story is well told, with adequate attention to the general situation and the comments on strategical topics are notably fair and reasonable. One could wish, however, that there had been a rather larger provision of maps; one is badly needed for the Festubert-Givenchy fighting of 1915, and a plan would have been welcome in several other places.

The Great Delusion. A Study of Aircraft in Peace and War. By "NEON." London: E. Benn, Ltd. 1927. 12s. 6d. net.

The exaggerated claims that have been put forward in some quarters as to the achievements of "the air arm" in the late war, and the equally unbalanced prophecies that are so freely made about the future developments of aircraft tend naturally to provoke reaction and doubt, but this volume is hardly calculated to carry conviction. There is a lack of balance about its arguments, a tendency to concentrate on anything that tells against the air arm, such as the number of fatal accidents to airmen, the short life of an aeroplane, or the difficulties of navigating and mooring airships, and a similar tendency to ignore the effects undoubtedly produced by aircraft in conjunction with other arms. There is no mention, for example, of the part that British aeroplanes played in Allenby's "crowning mercy" in Palestine in September 1918. The veil of anonymity which surrounds "Neon" drives the inquirer into the writer's credentials back on to the indirect evidence supplied by the book and the general impression it leaves is hardly encouraging. It may be admitted that "Neon" is more successful in making out a case against the airship—in its present stage of development—than against

the aeroplane, and the limitations of the aeroplane as an "air-keeping" vessel must not be overlooked, especially when its capacities as a defensive weapon are under discussion, but one is left wondering whether the writer is really qualified to speak so very dogmatically on such a complicated and largely technical question.

My Working Life. By Colonel the Lord SYDENHAM OF COMBE, G.C.S.I., G.C.M.G. London: John Murray. 1927. 21s. net.

The long "working life" which Lord Sydenham narrates in these pages has covered a remarkable variety of experiences in many quarters of the globe—Australia, India, Egypt, North America, besides most countries of Europe and several Colonial garrisons; it has been no less notable for the variety of subjects with which Lord Sydenham has been concerned, military, political and social, from the Esher Committee for the reorganization of the War Office, to the Bryce Conference on the Second Chamber, and the book contains much that will be of interest to a variety of readers. To soldiers the earlier chapters will be more attractive than the later ones, which deal mainly with his work as Governor of Victoria (1901-1903) and of Bombay (1907-1913), and with his political activities in the House of Lords since 1913. The earlier chapters are mainly concerned with his professional activities, his experiences of active service in the Tel-el-Kebir and Suakin (1885) campaigns, his work on the Colonial Defence Committee between 1885 and 1892, a precursor of his services on the Committee of Imperial Defence between 1904 and 1907, and his efforts with his pen to spread sound doctrines on military and naval topics. Lord Sydenham's contributions to the Press, daily, weekly and monthly, display him as a most assiduous, and versatile writer; incidentally he reveals himself as the author of "The Last Great Naval War," one of the very best of those forecasts of future wars of which Chesney's "Battle of Dorking" was the prototype. This brochure, which was published in 1891, was written with remarkable skill and contained in the guise of fiction some admirable enunciations of strategical truths and principles, comparable to the tactical teachings of "Duffer's Drift."

While there is much in the book which is concerned with bygone controversies, such as the rival advantages of the Nile and the Suakin-Berber routes to Khartoum, of which last Lord Sydenham was a persistent and convinced advocate, there is much that throws light on more recent events and lessons of real importance can be gathered

even from the events of the 'eighties. Had the conclusions to be drawn from the bombardment of Alexandria, and expounded in Lord Sydenham's report, been learnt, marked and inwardly digested by those in responsible positions at the Admiralty in 1914-1915 the initial blunders which so fatally handicapped the whole Dardanelles enterprise might well have been avoided (*cf.* pp. 35 and 345), and this is not the only point over which Lord Sydenham had the mortification of seeing his teaching neglected and his prophecies of the consequences proved true during 1914-1918. It is a pity that he should twice (pp. 194 and 317) assert that the Fifth Division was held back along with the Sixth in August and September 1914; but this is one of the few slips in an interesting and instructive volume.

A History of the British Army. By Sir J. W. FORTESCUE. Vol. XII, 1839-1852, and Vol. of Maps. Macmillan. 40s.

Sir John Fortescue goes steadily on to his appointed end, the completion of his classic history down to the year 1870, the volume here reviewed being the last but two. In this twelfth volume we visit in his company, China, New Zealand, and South Africa; but the bulk of our time is spent in India, where we are taken through the disgraceful and disastrous first war with Afghanistan, Charles Napier's brilliant little campaign in Scinde, the Sikh wars—perhaps the hardest-fought of all our Indian campaigns—and the second Burmese war. Sir John's narrative powers are always great; his researches have been, as usual, indefatigable; his characters live (though one is not quite sure that they would all recognize themselves if they could have the advantage of seeing themselves as Sir John Fortescue sees them); and his opinions are as provocative and as strongly expressed as ever. The theme of our conquest of India, moreover, should be one of surpassing interest; as a feat of arms, it exceeds in brilliancy and fruitfulness many better-known military epics, such as—to take two random instances—the Spanish conquest of Central America and the wars of Charles XII of Sweden; as an event in world history, nothing between the Reformation and the French Revolution can compare with it in importance. And yet it is impossible to resist the feeling that this wonderful story, even as told by Sir John Fortescue, is less interesting than it ought to be. Perhaps it is that we, who have lived through a greater war, are too jaded in spirit to appreciate at their full value these exploits of dead and gone soldiers; perhaps we entertain

some sub-conscious feeling that the wars described are not very like the reality of war as we know it ; perhaps we are just weary of the very name of war and all that it means.

It is a pity, for the historian has here to tell of some very noteworthy matters, and tells them with admirable vigour and vividness. The pitiful tale of the crimes and follies of the First Afghan War and its lost army ; the sparkling campaign which gave us Scinde and established Charles Napier's name high on the roll of our Indian generals ; the remarkable joint operations on the Chinese coast, so full of strategic lessons of value even to-day ; the equally remarkable but wholly dissimilar war in Burma, where also both soldiers and sailors had to play their parts ; the curious combats with the Maoris, the most engaging, yet perhaps the most formidable of all our native adversaries ; the hardly-contested battles of the much-misunderstood Gough against the only foemen in India really worthy of our steel ; and the little-known exploits of Harry Smith in South Africa—all these the author tells at length and in great detail, and passes on every incident and on every man a clear and decided judgment. He thinks nothing of Sale or his absurdly overrated defence of Jalalabad ; he thinks very highly of Gough and his conduct of the Sikh wars ; he admires Harry Smith without being blind to his faults ; and his view of Indian administrative methods, amusingly yet forcibly expressed in the preface and elsewhere, will commend itself to any British soldier who has read the history of any of our campaigns in that country. Altogether the volume is a well-told story of a vitally important period in our military history, and a worthy successor of the eleven others that have preceded it. The maps are bound separately and are good in every respect.

The Autobiography of a Woman Soldier. A brief record of Adventure with the Serbian Army, 1916-1919. By FLORA SANDES (Captain, Serbian Army).

In August 1914 Miss Sandes went out to Serbia as a Red Cross nurse, and she "just naturally drifted, by successive stages, from a nurse into a soldier," though it took a special Act of Parliament to allow of her promotion to commissioned rank. The 2nd Infantry Regiment found nothing strange in a woman joining the ranks—there was already a Serbian woman serjeant in the regiment—but that an Englishwoman was ready to fight and die with them struck their imagination and secured their affection and respect.

As a little girl she used to pray every night that she might wake up and find herself a boy ; and for seven years she lived, breeched and booted, on terms of complete comradeship with the N.C.O.'s and men of her Serbian regiment. She writes straightforwardly and pleasantly of the details of her soldier's life. She started with typhus, was later wounded in twenty-four places (duly counted by the other woman-serjeant) with grenade splinters, and ended the final advance with Spanish "flu," when, successfully dosed by a veterinary surgeon, she completed her cure by taking charge of a doctorless emergency hospital.

Refusing all temptations to become *embusquée*, she honestly fought her way up the ladder from private to *vodnik*—the *vod* is about fifty men under a subaltern—and her story is an unvarnished account of adventures and hardships in the ranks of a typical Serbian platoon, for it must not be thought that, though regarded by all ranks as a mascot and often much fêted, she did not have to carry out all the duties of command proper to her rank of the moment, as well as suffering all the hardships and dangers of her comrades. She shows herself, indeed, an efficient subordinate leader of men in war, and even in peace. Her book should make a special appeal to all who have ever served in the ranks in our own army, as well as to those who care to know more of the life and mentality of this heroic, and in many ways most lovable, peasantry.

The wish to be something other than oneself is early and deeply set in the nature of most of us ; there is certainly no finer satisfaction in life—deplorable as this may seem to many—than that got from great danger, fatigue, and hardship, gone through with comrades in a fighting unit ; and Miss Sandes, by her romantic quality of never turning away from any adventure or job of work that came to her, fully earned the deep satisfaction she obviously got from her soldier's life.

The Beginnings of Organized Air Power. By J. M. SPAIGHT.
London : Longmans. 17s. 6d. net.

This is a book that needed to be written. It tells authoritatively, and for the first time, the story of the events which led to the creation of the Air Ministry and of the Royal Air Force. It deals, further, succinctly and adequately with the war air organization in Germany, France and the United States, and summarizes the comparative air strengths of the four chief Powers in 1918. What Mr. Spaight shows incontestably, is the fact that Great Britain led the world in air power in 1918. This he attributes, in part, to the differences in

air organization in the four countries during the war, claiming superiority for the British system which gave us ultimately a separate department of State. Ultimately ! Although Britain, of all the belligerent States, was the only one to organize her air power on a unified basis during the war, one wonders, when reading this book, how that consummation came to be so long delayed. Any critic of a separate air service, not hopelessly prejudiced, who gives this treatise the serious attention it deserves, should remain thereafter for ever silenced.

The pivotal chapter in the book, rightly placed at the beginning, is also one of the most interesting. This tells the story of the fighter machines, showing how the opposing belligerents gained alternately the upper hand. From 1916 onwards the development of the air service was dominated by the absolute need for fighting superiority, and this need focussed attention on the whole home organization. The result was the setting up of the Second Air Board (Lord Cowdray's), which unlike its predecessor, presided over by Lord Curzon, had definite executive functions and was, in effect, a Ministry. It was laid down that any or all of the duties of the Admiralty and War Office in connexion with the supply of aircraft might be transferred to the new Board. This organization of supply was the first great step. The next and final one, the fuller organization of personnel and general administration, came in the beginning of 1918, with the creation of the Air Ministry and of the Royal Air Force.

In his fighting chapter, Mr. Spaight brings out clearly the far-reaching effects of the Fokker predominance which began in the autumn of 1915 and ended about May of 1916. But he does less than justice to two British pushers which played an outstanding part in overcoming that predominance on the British front. We mean the D.H.2 and the F.E.2b. The former may not, as some of its pilots claim, have "literally hounded the Fokker out of the sky," but the fact remains that the appearance of the D.H.2 in numbers marked the end of the "Fokker Scourge." But this is a small point and detracts nothing from Mr. Spaight's masterly and lucid study.

The Growth of Europe through the Dark Ages A.D. 401-1100. By General SIR EDMUND BARROW, G.C.B., G.C.S.I. London : Witherby. 1927. 10s. 6d. net.

In this "synchronal synopsis" of the Dark Ages, General Barrow traces "the evolution from tribal to national status" in

Europe during seven centuries. To each century he allots one chapter, but he adopts two methods of treatment. With each of the first two, as containing "no such units as organized autonomous nations," he deals in four fairly equal periods: of the last five he treats in "territorial compartments." He ends his survey with the First Crusade, which he regards as "the first European League of Nations with a common object." This view may be traced to the author's belief that history always repeats itself, a belief which leads him to some rather fanciful comparisons. Probably some exception will be taken to this *terminus ad quem*: for the First Crusade can hardly be termed an international movement, being mainly recruited from the feudal magnates of the second rank, especially the barons of France and its French-speaking neighbours.

The marshalling of events into watertight compartments of centuries does not make for simplicity, and the author would probably have done better to select certain epoch-making issues as centres round which to group the minor events illustrating their tendencies. His sense of values seems to give the preference to personalities and events over ideas and institutions. Had he realized the full significance of the Roman Empire as an undying idea and ideal, he would not have rendered *Carolo Augusto* in Leo III's address to Charles the Great by "August Charles."

This "manual" aims at giving a clear and accurate summary of a period hardly ever studied in our schools and generally neglected by more mature readers. To those lacking time or opportunity to consult the authorities quoted in the preface it will prove a serviceable guide, and a useful introduction to those who wish to pursue the subject further. But it needs careful revision. Two wrong dates leave the impression that Louis III, the last Carolingian Emperor, has been confused with Louis "the child," until thirty pages later the former's tragic story is found accurately outlined. There are some careless mistakes in the genealogical tables. By way of epilogue a chapter has been added on "Europe to-day" which contains the statement that the present sovereign of Yugo-Slavia is an Obrenovich.

Tseng-Kuo-Fan and the Tai-Ping Rebellion. By W. J. HAIL.
HUMPHREY MILFORD. 18s.

It is safe to say that of the subject of this book, the Tai-Ping rebellion in China between the years 1851 and 1865, few educated people have any knowledge beyond a dim recollection that General Gordon played a conspicuous part in its suppression. Consequently the author has at least the advantage of having broken comparatively

virgin soil, and his story should arouse considerable interest, particularly at the present juncture, when China is passing through another time of trial and armies are once more fighting over the territory which was formerly the scene of the Tai-Ping rebellion.

The Tai-Pings, a sect of religious fanatics holding doctrines not unlike those of Christianity, took advantage of the weakness of China's military and administrative organization under the Manchu dynasty to overrun the greater part of southern and eastern China and establish themselves in a wide area of country with headquarters on the Yang-tse at Nanking. All the efforts of the imperial generals failed to dislodge them, until the rise to high command in 1854 of Tseng-Kuo-Fan, the hero of this book and the saviour of the Manchu dynasty, who by a series of skilfully combined operations, both by land and by river, succeeded in working northwards down the Yang-tse and its tributaries, steadily restoring order in the revolted area, and finally capturing Nanking and dispersing the remaining rebel forces. The process took him over ten years ; and by the end of it untold misery and destruction had been inflicted on China, and the lives of some twenty millions of human beings had been sacrificed ; but her integrity and unity had at least been assured and the threatened disruption of the empire averted.

That the cost of this achievement had been so appallingly high was in no way the fault of Tseng-Kuo-Fan, who, himself no soldier, perpetually short of funds, hampered by the jealousy of his colleagues and by the incompetence and corruption of his superiors, showed himself not only patient, enduring and brave, but also able, honest and modest—so much so that the high honour done him by this American author in comparing him with George Washington does not seem to flatter him beyond his deserts. Incidentally, Professor Hail places the achievements of Gordon, whose reputation hardly stands so high now as it did a generation ago, in their true light as a very minor and subsidiary episode in the story of the suppression of the rebellion. He tells his story with admirable clearness, and supplies maps with the aid of which it can be easily followed.

Essex Units in the War, 1914-1919. Vol. III, 2nd Batt. The Essex Regt. By J. W. BURROWS. J. H. Burrows & Sons, Southend-on-Sea, 1927. 5s. net.

This is the third volume of the series dealing with Essex Units in the War which Messrs. Burrows and Sons are publishing by arrangement with the Essex Territorial Force Association, the two earlier

ones having told the stories of the 1st Battalion, Essex Regiment, the old 44th, and of the Essex Yeomanry. This well-produced volume deals not only with the splendid work of the "Pompadours" between the 4th of August, 1914 and the Armistice, but devotes over 80 pages to their previous services and gives an interesting account of their post-war experiences, which include two brief but exciting visits to Constantinople from June 1920 to October 1920, and again from November 1921 till the following March.

Raised as the 58th Foot early in the Seven Years' War and re-numbered 56th in 1757, the battalion has been associated, in name at any rate, with Essex since 1782, when it received the title of West Essex, a name which curiously enough still appears along with its number, 56, on its regimental colour, presented to it as long ago as 1864. Of its early services the most notable are its shares in the capture of Havana in 1762, which earned it the honour of "Moro," and in Heathfield's stubborn defence of Gibraltar from 1778 to 1782. It was none too lucky in the Revolutionary and Napoleonic wars, being twice wiped out by disease in the West Indies, and missing the Peninsular campaigns and Egypt; but it played a prominent part under a rather remarkable officer, General Sir H. S. Keating, then Lieut.-Colonel of its 2nd Battalion, in the reduction of the islands of Bourbon and Mauritius. Some new light is thrown on this interesting episode from hitherto unpublished material. It should also be noticed that the 56th had the unusual distinction of raising a 3rd Battalion, which fought under Graham in the Netherlands in 1814.

Between 1815 and 1914, the 56th saw relatively little fighting, though it came in for the later stages of the Crimean and South African Wars and was up the Nile in 1884-1885. It was to make up for this, however, between 1914 and 1918, as it was in the Fourth Division, and from Le Cateau onwards took its full share in the heavy fighting which fell to the lot of that very distinguished unit. Its great day, if one is to make a selection of one, was clearly the 28th of March, 1918, when, being in the front line of the Fourth Division near Gaucelle, it was largely responsible for the decisive repulse of the German effort to break through, though at the cost of being practically wiped out. But it had done magnificent work in "Second Ypres" where it twice saved the line by promptitude in counter-attacking—it's time that the Fourth Division's share in that struggle was properly recognized—while it had done admirable work on the Somme and at Arras in 1917, to say nothing of its exploits at Le Gheer in October 1914. Mr. Burrows has given quite a good account of all this, though not always too well proportioned. There

are several episodes of which one would have liked a fuller account, and while he gives excellent plans for Le Cateau, for the crossings of the Marne and Aisne and for the Le Gheer fighting, he leaves the reader without the help of a map for any of the later fighting except the 28th of March, 1918. The absence of an index is a more venial omission, not so that of a casualty list and of a table of "Honours Awards," and in a volume devoted to one battalion a list of officers who served with it is not an impossible thing to construct. There are a few slips: the 10th Essex, for example, were not engaged at Loos, and the 1st Connaught Rangers were never in the Second Division (p. 116); but on the whole Mr. Burrows and the 56th may be congratulated on this production.

The Staff and the Staff College. By Brevet-Major A. R. GODWIN-AUSTEN, O.B.E., M.C., The South Wales Borderers. Constable & Co. 21s.

The officer of to-day is probably coming to regard the Staff and the Staff College as so much a matter of course that it may hardly occur to him that each has a history; whilst the civilian taxpayer remains hardly aware of either. Both will find much of interest in this story of the growth of an educational institution, the fortunes of which, throughout its career, reflect the vicissitudes of the British Army as a whole. Major Godwin-Austen has had no light task, for it has been necessary to lay under contribution a host of books and documents in compiling this very readable volume which is published with the blessing of Sir George Milne, the present Chief of the Imperial General Staff.

The Staff College had its origin in the Senior Department of the Military College founded by Major-General John Gaspard Le Marchant, afterwards killed at Salamanca, and established at High Wycombe in 1799. The project had the hearty approval of the then Commander-in-Chief, the Duke of York, and also, we are told, of King George III himself. "Students absorbed a great deal of practical value in the way of reconnaissance work, schemes and Staff duties." No less than 82 of them served on Wellington's staff in the Peninsular War and these included many famous names. Other distinguished officers, such as the two Napiers, joined in 1814 and 1815 to acquire the training which active service had shown them to be of value.

The College suffered as the Army suffered during the long peace which followed Waterloo. Previously its efficiency had been impaired

by the frequent absence of instructors on active service—in this respect history was to repeat itself more than once—but now it suffered from rigorous economy and sheer neglect. Its grant from the public funds was withdrawn in 1832 for many years ; it provided little more than an elaborate course in surveying ; and its students got used to seeing such Staff appointments as fell vacant go to untrained men with money and influence. “ So,” says Major Godwin-Austen, “ the College slept and attracted mainly entrants of a somnolent nature.” But he adds : “ Its very somnolence saved it from destruction.”

The price of this neglect was paid in full by the Army during the Crimean War. Then there came an awakening and a reformation, so that the renamed Staff College embarked upon a new career. The new curriculum was far from providing a practical training in Staff duties—mathematics were still a fetish—but many brilliant men and many not at all brilliant passed through in the early 'sixties. And still the usefulness of the establishment was prejudiced because so few of its students found Staff appointments.

After showing how the College benefited by the wave of reform which broke from Cardwell, the author turns off to brave the reproaches of the ultra-practical and very serious minded by telling us of the institution of the Drag and all the diverting incidents of the first run. But the hounds, point-to-point meetings and the playing of games were important, for they did much to increase the prestige and popularity of the Staff College throughout the Army. Meanwhile, Staff Officers were sent forth to distinguish themselves greatly in Wolseley's successful campaigns.

The instruction given now became more and more practical, and if the College turned out “ some cranks and not a few pedants,” there is an ever-growing list of distinguished officers with *p.s.c.* attached to their names. The South African War, 1899–1902, it is pointed out, emphasized our need for more trained Staff Officers and a more up-to-date plan for the allocation of Staff duties. In spite of the criticism of the time, evidence is produced to show that the average Staff College graduate did very well on active service. Before the end of the war the Staff College itself had “ petered out ” as its instructors and students were gradually taken away. But a new start was soon made with fresh vigour and teaching revised in the light of experience gained in the field. Then, in 1905, a Staff College was opened in India.

The Great War found us, as before, with far too few Staff Officers, and again the Staff College ceased to function for the usual

reasons. But special measures had soon to be taken, both in England and overseas, to give selected officers training in Staff duties. Now the good work at Camberley has been in full swing once more for over eight years with fresh lessons, experiences and inventions to assimilate. The institution of the Imperial Defence College is regarded by Major Godwin-Austen as the final stage in the education of our Staff. In conclusion he expresses a hope that resentment against the Staff is disappearing. It is indeed to be hoped so, notwithstanding the fact that the results of bad Staff work are too often painfully apparent to the troops, whilst the good work often passes unheeded simply because it is good.

A Soldier Diplomat. By Brigadier-General SIR DOUGLAS DAWSON, G.C.V.O., K.C.B., C.B., C.M.G. John Murray. 18s.

The writing of such reminiscences as these must be the best of all ways of living an enjoyable career over again. Sir Douglas gives us an unpretentious and rather discursive narrative and occasionally repeats himself as raconteurs will, but he certainly sets down naught in malice. He was at Eton and entered the Coldstream Guards in 1874. Five years later he passed into the Staff College, a Guardsman candidate being a *rara avis* in those days. He relates how he complained to his colonel that the entrance examination was fixed for the week after Ascot, and met with the reply: "My dear boy, if you will go in for this sort of thing you must expect to have to do with people who don't understand the ordinary pursuits of a gentleman." There follows some criticism of the Staff College as the author found it, particularly interesting in view of the recent publication of Major Godwin-Austen's book.

Our author's active service consisted of the Egyptian and Soudan campaigns of 1882, 1884 and 1885. He was with Sir Herbert Stewart's column of the Gordon Relief Expedition and fought at Abou Klea. Sir Douglas was military attaché in Vienna for five years and expresses sincere admiration for the old Emperor, but his recollections of the Kaiser are not so favourable. He was happy and popular among his Austrian friends partly, perhaps, because he was such a great man for horses.

It may be remarked that Sir Douglas has been very properly discreet as regards the long period during which he held appointments in the Royal Household, but then he is hardly likely to err in matters of taste. The fact that he never kept a diary may, in these days, be accounted to him for positive righteousness.

The War History of the 1st Northumbrian Brigade, R.F.A. (T.F.).

Messrs. Mawson, Swan & Morgan, Grey Street, Newcastle-upon-Tyne. 10s. 6d. net.

This is the record of a Territorial Artillery brigade from its mobilization in August, 1914, until its return to England in 1919, after more than four years' service in France and Belgium.

Major C. H. Ommanney, R.F.A., the author, had been adjutant to the Brigade for two years when war broke out, and later was in command of a battery until the end of 1916. He writes, therefore, with an inside knowledge of many of the events which he chronicles. Throughout the book he makes use of official and personal diaries from which he quotes freely, and the result is an interesting and full account of the day-to-day life of an artillery brigade during the war.

After eight months' training at home the 1st Northumbrian Brigade landed in France on the 18th of April, 1915, as part of the 50th Northumbrian Division, and had not long to wait for its baptism of fire, for within five days the enemy launched his first gas attack at Ypres, and the 50th Division was rushed up the battle zone. During the first few months in France the Brigade were handicapped owing to the shortage of 15-pdr. ammunition, for it was not until the following October that it was equipped with 18 pdrs.

It spent the winter of 1915-1916 in the Salient, and in the following summer took part in the operations on the Somme. It remained in the Somme area until it was moved to Arras for the offensive which commenced in April, 1917. The following October the Brigade returned to Ypres, but to a very different Ypres to that of 1915-1916. The story of the four months passed there in the mud is vividly set forth by Major Ommanney, and it must have seemed to those who endured the gas and shelling that the last word in the horrors of war had been reached. But the Brigade had still its worst time to come. After sharing in the retreat in March, 1918, it was ordered to the Champagne country, where all ranks hoped that they were to enjoy a more peaceful spell. But this was not to be. What actually happened is vividly described by Major Ommanney, although he was himself no longer with the Brigade.

The last few chapters deal with the Allied Offensive in which, as the infantry of the 50th Division had practically ceased to exist after the fighting on the Aisne, the artillery acted as an Army Brigade. The last three months saw it on the Somme, the Scarpe

and the Sambre, fighting behind different divisions and brigades, including the 10th Australian Infantry Brigade in the attack on Mont St. Quentin. The extract quoted from Colonel Shiel's diary describing cooperation with this Brigade is a shining example of the way in which the Australians won the regard of all who fought side by side with them.

It is much to be regretted that there are no maps included to illustrate the text, while the absence of an index is a serious mistake which should not have been made.

The Campaigns and History of the Royal Irish Regiment. Vol. II, from 1900 to 1922. By Br.-General STANNUS GEOGHEGAN, C.B. W. Blackwood & Sons, Edinburgh and London. Price 21s. net.

The reader of Volume II of the history of the Royal Irish Regiment will find in it a record of a brave career. The Regiment unfortunately has for the moment been disbanded, and has therefore ceased to exist. Its colours have been received by the King, who, "speaking with evident emotion," has pledged his word that they shall be honoured and protected in Windsor Castle as hallowed memorials of a brave and loyal unit. Yet, in spite of its disbandment, it is safe to say that the history of the Royal Irish Regiment will still be cherished not merely as a record of the past but also as an inspiration for the future. The Free State, on the one hand, will some day surely wish to revive the Regiment. And, on the other hand, as General Burton Forster said in the Irish way to Irish men at the final review of the Regiment before it was disbanded: "When the next war comes, may you all be there as you have been in the past, the first to answer to the call of duty"—a call to which the descendants of those who served in the last Great War cannot fail to respond.

As was to be expected of a hard fighting regiment, the Royal Irish played their part on all of the principal fronts from 1914 to 1918, with the exception of the far-off Mesopotamian theatre. Of their nine battalions the 2nd, but as it happened the first in the field, was so battered in 1914 that, at the beginning of the battle of the Marne, its strength was less than 400 men. Six weeks later—it had received meanwhile ample reinforcements—the battalion had practically ceased to exist, for between the 19th and 21st October the casualties amounted to the terrible total of upwards of 750 officers and men. In March, 1918, the old spirit was nevertheless still alive, for more than 500 officers and men were then again

returned as casualties. Also, has it ever, one wonders, happened before in the world's history, as it did to this battalion, to begin and end a protracted, fluctuating war in exactly the same locality, not far from Mons? The 1st battalion was not long in following the 2nd to France, but its experiences were then not harder though more varied; for the battalion afterwards served successively in Macedonia and in Palestine. To the 3rd battalion fell what was perhaps the most trying task of all, the duty of helping to quell the rebellion in Dublin in 1916. The record of the 5th battalion, which was raised by Lord Granard, whose ancestor had long ago raised the Royal Regiment of Ireland itself in 1694, resembles that of the 1st, for it went to Gallipoli, to Macedonia, then to Palestine, and finally to France. The 6th battalion, however, in which Captain W. Redmond served and died, and the 7th were continuously on the Western Front; and to part of the latter, after desperate fighting at St. Quentin in 1918 and heavy losses, was given the honour of furnishing for a time "a training staff for American units."

To write a good history of so many battalions in so many theatres is evidently not an easy task. General Geoghegan, therefore, is to be congratulated on having produced a lucid, well-balanced story of their actions, even if some of its historical background is not always in accord with the latest information. The book also is well printed, and although to follow the tracks of the various battalions on the Western Front, as shown on the map in the pocket, is as interesting and much more profitable than a cross-word puzzle, the maps on the whole are remarkably good and clear. The index is adequate, and the appendices are ample, giving, among other information, full details of both casualties and honours.

ARTICLES IN REVIEWS

The Cornhill Magazine, August, 1927. "A Night Affair: A Memory of Major-General Sir T. Capper, K.C.M.G., C.B., D.S.O.," by Brig.-General H. H. Austin, C.B., C.M.G., D.S.O.

The Nineteenth Century and After, August, 1927. "War, Policy, and Progress," by Lieut.-Colonel A. G. Baird Smith, D.S.O.

The National Review, September, 1927. "Ypres, 1916: Some of my War Experiences," by Captain Wilmot P. M. Russell, M.C.

The Cornhill Magazine, October, 1927. "Reputations: Ten Years After. I. Haig of Bemersyde. The Essence of Britain," by Capt. B. H. Liddell-Hart.

The Quarterly Review, October, 1927. (1) "The Characters of Napoleon and Wellington compared," by Algernon Cecil.
(2) "The Mystery of Strategy," by Lieut.-Colonel F. E. Whitton, C.M.G.

This article forms a review of *A Study of War*, by Admiral Sir Reginald Custance, and six other works.

(3) "Empire Defence," by Major-General Sir George Aston, K.C.B.

This article forms a review of *My Working Life*, by Colonel Lord Sydenham of Combe.

Blackwood's Magazine, November, 1927. "Sadon: The Berserk Adventures of a Subaltern (being an Episode in a General's Life)," by Lieut.-General Sir George MacMunn, K.C.B., K.C.S.I., D.S.O.

The Cornhill Magazine, November, 1927. "Reputations: Ten Years After. II. Ferdinand Foch: The Symbol of the Victorious Will," by Captain B. H. Liddell-Hart.

The National Review, November, 1927. (1) "Sea, Land, and Air," by Whitehall.

This article forms a review of *The Great Delusion*, by "Neon."

(2) "Reflections of a Would-be Airman," by the Hon. Arnold Keppel.

The Nineteenth Century and After, November, 1927. (1) "The Administration of the British Army," by Lieut.-General Sir Travers Clarke, G.B.E., K.C.B., K.C.M.G.

(2) "War Graves and the British Commonwealth," by Major-General Sir Fabian Ware, K.C.V.O.

Blackwood's Magazine, December, 1927. "General Dyer: Some Recollections," by E. P. Y.

The Cornhill Magazine, December, 1927. "Reputations: Ten Years After. III. Erich Ludendorff: The Robot Napoleon," by Captain B. H. Liddell-Hart.

LIST OF BOOKS RECEIVED

"The Prison-Breakers." By Alan M. Philip. Published by Philip Allan & Co., Ltd. 10s. 6d. net.

"The Strange Adventures of Frederick Baron Trenck." Edited by Philip Murray. Published by Philip Allan & Co., Ltd. 10s. 6d. net.

"Great Captains Unveiled." By Captain B. H. Liddell-Hart. Published by William Blackwood & Sons, Ltd. 12s. 6d. net.

"These Men, Thy Friends." By Edward Thompson. Published by Alfred A. Knopf.

"Military Operations," Vol. III. France and Belgium, 1915. (History of the Great War.) Compiled by Brigadier-General J. E. Edmonds, C.B., C.M.G., R.E., and Captain G. C. Wynne. Published by Macmillan & Co., Ltd. 12s. 6d. net. Maps 5s. 6d. net.

"India by Air." By Sir Samuel Hoare. Published by Longmans, Green & Co., Ltd. 6s. 6d. net.

"The Beginnings of Organized Air Power." By J. M. Spaight. Published by Longmans, Green & Co., Ltd. 17s. 6d. net.

"Where Cavalry Stands To-day." By Lieut.-Col. H. V. S. Charrington, M.C., 1st Royal Lancers. Published by Hugh Rees, Ltd.

"The Mechanization of War." By Victor Wallace Germain. Published by Sifton Praed & Co., Ltd. 8s. 6d.

"The Army and Sea Power." By Major R. B. Pargiter, R.A., *p.s.c.*, and Major H. G. Eady, M.C., R.E., *p.s.c.* Published by Ernest Benn, Ltd. 10s. 6d. net.

"The Oxfordshire Hussars in the Great War, 1914-1919." By Adrian Keith-Falconer. Published by John Murray. 18s. net.

"Journal of the Waterloo Campaign kept throughout the Campaign of 1815." By Cavalie Mercer. Published by Peter Davies, Ltd. 10s. 6d. net.

"Horse Lovers." By Lieut.-Col. Geoffrey Brooke, D.S.O. Published by Constable & Co., Ltd. 12s. 6d. net.

"A Soldier Diplomat." By Brigadier-General Sir Douglas Dawson, G.C.V.O., K.C.B., C.B., C.M.G. Published by John Murray. 18s. net.

"Through the Wheat." By Thomas Boyd. Published by Charles Scribner's Sons. Price 10s. 6d.

"Rugger." By W. W. Wakefield and H. P. Marshall. Published by Longmans, Green & Co., Ltd. 15s. net.

"The Old Flying Days." By Major C. C. Turner. Published by Sampson Low, Marston Co., Ltd. 25s. net.

"Will Civilization Crash?" By Lieut.-Comdr. J. M. Kenworthy, M.P. Published by Ernest Benn, Ltd. 12s. 6d. net.

"The Staff and the Staff College." By Brevet-Major A. R. Godwin-Austen, O.B.E., M.C. Published by Constable & Co., Ltd. 21s. net.

"Field Marshal Lord Napier of Magdala, G.C.B., G.C.S.I." By Lieut.-Col. The Hon. H. D. Napier, C.M.G. Published by Edward Arnold & Co. 21s. net.

"A History of the Foot-Guards." By Major H. L. Aubrey-Fletcher, D.S.O., M.V.O. Published by Constable & Co., Ltd. 31s. 6d. net.

"A Postscript to the Records of the Indian Mutiny." By Lieut.-Col. G. H. D. Gimlette, C.I.E., I.M.S. Published by H. F. and G. Witherby. 10s. 6d. net.

"Great Storms." By Carr Laughton and V. Heddon. Published by Philip Allan & Co., Ltd. 10s. 6d. net.

"Notes on the Various Arms of the Service—Their Characteristics and Employment in the five Principal Tactical Operations of War." By Capt. A. M. Barrett, M.C. Published by Gale & Polden. 1s.

"Marching with Sherman. Passages from the Letters and Campaign Diaries of Henry Hitchcock." Edited by M. A. de Wolfe Howe. Published by the Yale University Press. 18s. net.

"Psychology and the Soldier." By F. C. Bartlett. Published by the Cambridge University Press. 7s. 6d. net.

"The Campaigns and History of the Royal Irish Regiment." By Brig.-General Stannus Geoghegan, C.B. Published by William Blackwood & Sons, Ltd. 21s. net.

BERTRAND STEWART PRIZE ESSAY, 1928

Subject selected by the Army Council for the sixth Competition :

“ Amphibious Warfare. Refer briefly to its prevalence in our past wars; discuss its probability in the future, and the best methods of meeting our requirements in this form of warfare.”

RULES OF THE COMPETITION

1. The right to compete is limited to British subjects, who have served, or who are actually serving, as officers or in other ranks or ratings of His Majesty's forces.

2. The term “ His Majesty's forces ” includes the Navy and the Royal Marines, the Regular Army, the Special Reserve, the Territorial Army, the Militia, and the Royal Air Force, the New Armies which took part in the late war, and also the Naval, Military and Air forces of India, the Dominions and the Crown Colonies.

3. The essays submitted for the prize must not exceed 10,000 words in length ; they must be typewritten and submitted in triplicate.

4. The authorship of the essays must be strictly anonymous. Each competitor must adopt a motto and enclose with his essay a sealed envelope with his motto typewritten on the outside and his name and address inside.

5. The title and page of any published or unpublished work, to which reference is made in any essay or from which extracts are taken, must be quoted.

6. The essays, which are to be addressed to the Editors of the *Army Quarterly*, must reach the office of the *Army Quarterly*, 94, Jermyn Street, London, S.W., not later than the 1st of March, 1928.

7. The essays will be judged by three referees—two to be appointed by the Army Council, the third to be one of the Editors of the *Army Quarterly*. The decision of the Referees, or of a majority of them, will be final.

8. The referees are fully empowered, if in their opinion, or in the opinion of the majority of them, no essay submitted to them comes up to a sufficiently high standard of excellence, not to award the prize ; or they may, if they consider such a course desirable, divide the prize among two or more competitors.

9. The result of the Competition will be made known in the *Army Quarterly* in July, 1928, and the prize essay will be published in that number of the Review. In the event, however, of there being two or more prize essays, the Editors of the *Army Quarterly* reserve to themselves the right of deciding which of these essays they will publish.

10. The copyright in any essay which appears in the *Army Quarterly* belongs to the Proprietors of the Review.

11. Neither the Proprietors nor the Editors of the *Army Quarterly* are to be held responsible for the loss or return of any essay submitted for the Competition ; nor do they incur any liability whatsoever in connection with the receipt of the essays, any dealings therewith, the judging thereof, or the reports thereon.

PSYCHOLOGY AND THE SOLDIER

BY

F. C. BARTLETT, M.A.

Crown 8vo. 7s 6d net

This book is divided into three parts. Part I deals with psychology in its relation to the problems involved in the selection and training of a recruit. Part II deals with social psychology. The third part gives a brief account of some of the mental disorders of warfare and of their treatment, in so far as a knowledge of these matters is necessary and helpful to the ordinary military officer.

Cambridge University Press, Fetter Lane, London, E.C.4

THE ARMY QUARTERLY

Required for binding, a clean copy of the issue for
JANUARY, 1924.

Please state price asked, inclusive of postage, to
The Manager, "The Army Quarterly," 94, Jermyn St., London, S.W.1

JUST PUBLISHED

WHERE CAVALRY STANDS TO-DAY

By

Lt.-Col. H. V. S. CHARRINGTON, M.C.,
12th Royal Lancers

A clear and concise review of the present-day position
of Cavalry as an instrument of modern warfare by
a recent instructor of the Staff College, Camberley.

Price 3/6. Postage 3d.

LONDON:]

HUGH REES, LTD., 5 and 7 REGENT STREET, S.W.1



Barr & Stroud Binoculars

NONE BETTER—AND THEY'RE BRITISH

**SHARP DEFINITION
LARGE FLAT BRILLIANT FIELD**

PRISMATIC BINOCULARS

Type	Magnification	Focussing	Diameter of Objective		Angular Field	Field of view in yards at 1000 yds.	Price
			Inch.	m/m			
C.F.1	6	Central	0.9	23	8°	138	£6 10 0
C.F.2	6	Central	1.2	30.5	8°	138	£8 2 6
C.F.3	6	Eye-piece	0.9	23	8°	138	£6 0 0
C.F.4	6	Eye-piece	1.2	30.5	8°	138	£7 7 6
C.F.8	8	Central	1.2	30.5	7°	122	£9 10 0

GALILEAN BINOCULARS

Type	Magnification	Diameter of Objective			Interocular Distance	Angular Field	Field of view in yards at 1000 yds.	Price
		Inch.	m/m	Lines				
CA.2	3½	2.19	55.6	26	65mm.	64°	112	£2 17 6
CA.3	3½	2.0	50.8	24	63.5mm.	61°	112	£2 12 6
CA.3	3½	2.0	50.8	24	62mm.	61°	112	£2 12 6
CA.4	3½	1.75	44.5	21	63.5mm.	61°	112	£2 7 6
CA.4	3½	1.75	44.5	21	62mm.	61°	112	£2 7 6

Prices include leather cases and straps.

Send for free booklet, "On Binoculars"

BARR & STROUD, LTD. ANNIESLAND, GLASGOW and
15 VICTORIA ST., LONDON, S.W.1.

Telegrams:—
Telemeter, Glasgow.

Codes.
5th & 6th Edition A.B.C.

Telegrams:—
Relemerlet, S.West, London.

THIS BOOK IS DUE ON THE LAST DATE
STAMPED BELOW

AN INITIAL FINE OF 25 CENTS
WILL BE ASSESSED FOR FAILURE TO RETURN
THIS BOOK ON THE DATE DUE. THE PENALTY
WILL INCREASE TO 50 CENTS ON THE FOURTH
DAY AND TO \$1.00 ON THE SEVENTH DAY
OVERDUE.

JUL 19 1933

JUL 17 1933

JUL 17 1933

JUL 19 1933

JAN 16 1967 3 2

MAR 15 67 4 PM

RECEIVED

8-23-84 JLL

Received in Interlibrary Loan

MAY 31 1966 6 8

AUG 12 1984

MAY 26 '66 ORCD

UC INTERLIBRARY LOAN

JAN 15 2003

JUL 26 1984

UNIV. OF CALIF., BERK.

LD 21-50m-1, '33

YC 53672

